



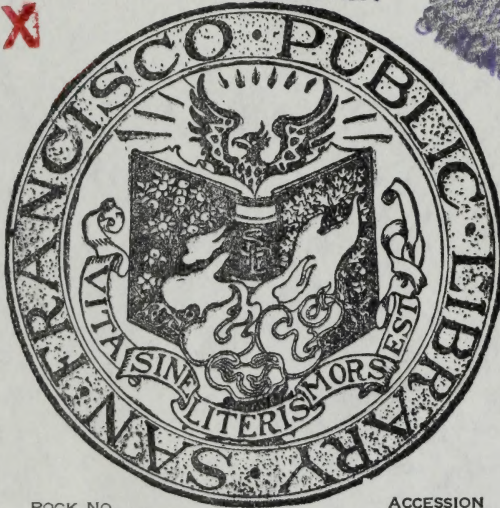


PERIODIC

PERIODIC

SAN FRANCISCO  
HISTORY CENTER

X



BOOK NO.

ACCESSION

352 P11<sup>1</sup>

410508


NOT TO BE TAKEN FROM THE LIBRARY

Form 37 10M 11-35



PERIODICAL DEPARTMENT





Digitized by the Internet Archive  
in 2011 with funding from  
San Francisco Public Library











# CALIFORNIA MUNICIPALITIES

Vol. 1.

San Francisco, November, 1899.

No. 4.

## The Annual Convention

Of the League of California Municipalities will be held at Pioneer Hall, San Francisco, on Wednesday, Thursday and Friday, December 13, 14, and 15, 1899. All city and town officers are earnestly requested to attend this meeting. An earnest body of thinking men seeking solutions for municipal problems will accomplish practical results.

### ..... CONTENTS. ....

The Water Controversy at Los Angeles .....	MAYOR FRED EATON
The Sequoia National Park .....	BEN M. MADDOX
The Laying Out of Cities .....	GEO. HANSEN
Bacteria as Destroyers of Masonry—Electric Lighting Contracts—Regarding Sewer Ventilation—The League Convention—Lamborn's Southern Trip—An Improved Lighter for Fire Engines—The Recent Elections—Recent Legal Decisions—Editorial—What the Cities are Doing—List of Cities and City Officials—Miscellany	



## Redwood Tanks, Towers.

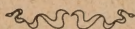
Millwork  
of all kinds.

Pacific Manufacturing Co.,  
SANTA CLARA.

4,250,000,000 gallons of water  
pumped per day by

## Worthington Pumps,

Henry R. Worthington,  
NEW YORK.



Pumping Machinery for all Duties.  
Water Works and Hydraulic Engineers.  
1,700 Cities supplied with Worthington  
Pumping Engines and Meters.

Pacific Branch:  
Rooms 27-28 3d Floor Mills Building,  
SAN FRANCISCO.

Send for Catalog and Water Works Lists.

## A. L. FISH,

Cor. Mission & First Sts.,  
San Francisco, Cal.,  
— Contractors for —

Water Works, Irrigating, Steam and  
Electric Power Plants, Complete.

Worthington Steam Pumps and Condensers.  
Roots' Rotary Power Pumps.  
Buckeye Automatic Cut-Off Engines.  
Amoskeag Fire Eng. Co's Steam Fire Engines.  
Steam Boilers.

## PACIFIC SURETY COMPANY OF CALIFORNIA.

Paid up Capital, - - - \$250,000  
Surplus as to Policyholders, 303,000

### GUARANTEE AND CASUALTY.

**Surety on Bonds.** Bonds of Suretyship issued  
on behalf of persons holding positions of trust.  
We also act as surety on Bonds required in Court  
proceedings.

Steam Boiler Inspection and Insurance.  
Plate Glass Insurance.

WALLACE EVERSON, *President.*  
JOHN BERMINGHAM, *Vice-President.*  
A. P. REDDING, *Secretary.*

HEAD OFFICE:  
326 Montgomery St., San Francisco.

## Redwood Poles

For ELECTRIC PLANTS, TELEPHONE,  
TELEGRAPH & POWER COMPANIES.

## Union Lumber Co.,

Room 28 Crocker Building,  
SAN FRANCISCO.

Telephone Main 324.



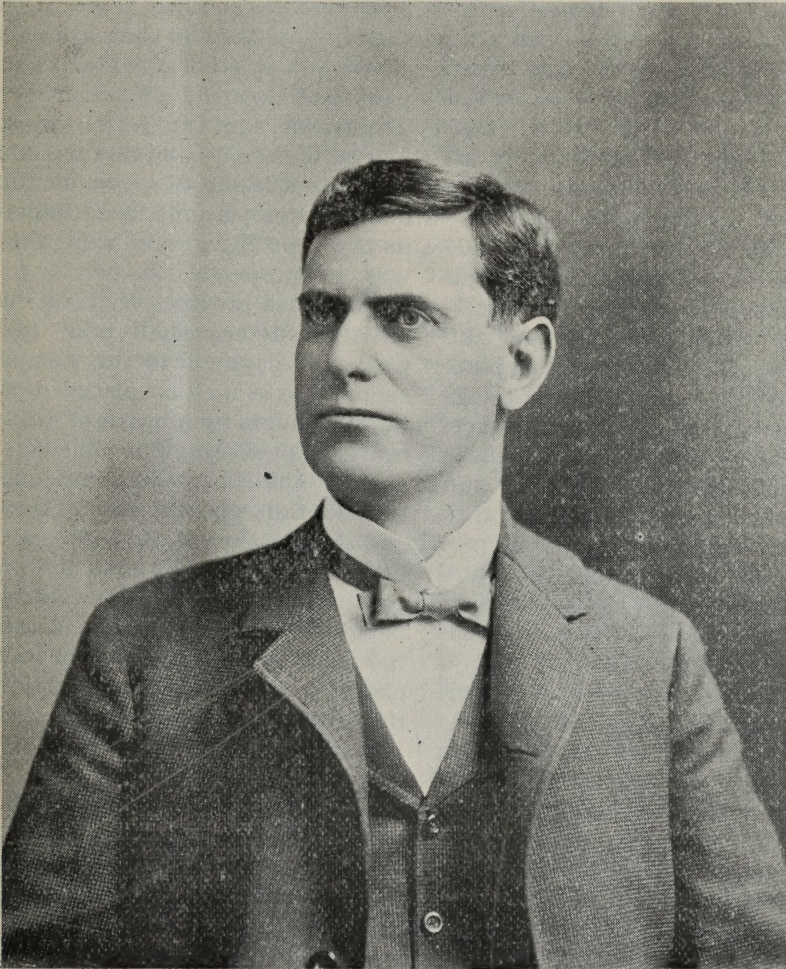
# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. I.

San Francisco, Cal., November, 1899.

No. 4.



*Fred Eaton, Mayor of Los Angeles.*

## The Water Controversy at Los Angeles.

THE extent to which a municipality should go in the acquisition and control of its public utilities is a question which each city must decide for itself.

In Los Angeles public sentiment has always been strongly in favor of the

municipal ownership and control of the water supply of the inhabitants, and it seems unfortunate that some way was not found whereby the city could have kept this control in its own hands.

The Los Angeles river, from which the present supply is taken, was dedi-



cated by the Mexican Government to the use of the inhabitants when the pueblo was established. The water used for irrigation has remained ever since under the control of the municipality. For a short time before the present water company was organized, the city attempted to distribute a domestic supply. A pile dam was built on the sand across the storm channel of the river, in order to create a head to operate an undershot wheel. This wheel was sixty feet in diameter, with buckets attached to the rim which dipped the water from the stream as the wheel revolved, and carried it up to a flume that conveyed it to a reservoir about one half mile distant. From the reservoir it was distributed through the streets in logs of about six inches bore. The pressure was too much for the logs and they soon became a nuisance. Shortly after the completion of these works a freshet destroyed the dam and the people were compelled to return to the water cart for their daily supply. They could not endure this primitive method after once enjoying the luxury of hydrant water, and when a few enterprising citizens came forward with a proposition to lease the works, reconstruct them and put in cast iron pipes of suitable dimensions, supplied by a gravity system, the proposal met with general favor. In 1868 the city authorities leased the works to these gentlemen for a term of thirty years. They then assigned the lease to the Los Angeles City Water Company, which has carried out in its own way the provisions of the instrument.

The fact that the lease contains the provision that, upon its termination, the works were to be returned to the city, is evidence that the people were then in favor of municipal control of the water supply, and no doubt they would have kept this control if the city could have raised money for the required improvements. But the town had a population of only about five thousand and was without public credit

or sufficient taxable resources to raise the necessary funds. The people were between the water cart and a monopoly, and they chose the latter.

The instrument which has bound the people for thirty years was always termed a lease by both parties until it terminated, when the Water Company suddenly discovered that while it was a contract, it was not a lease. The company had claimed, whenever it suited its purpose, that the water works belonged to the city and that the company was only a lessee. It was at one time seriously contemplating the repudiation of its taxes, on the ground that the plant was city property.

This lease provides that on its termination the city shall take over the works, on payment to the company of such value as may be placed upon the improvements by a board of arbitration, consisting of three members. Each party to the lease is to name one man, the two thus chosen select the third, and the decision of the three is to be final. We shall see later how this was construed at the end of the thirty years.

Another provision of the lease fixed the water rates of 1868 as the minimum charge to consumers during the life of the lease. As no one ever discovered just what these rates were, it was assumed, when rates were fixed by ordinance some years later, that the rates then existing were those of 1863. From time to time the company has submitted to slight reductions from the rates, in order to avoid a conflict.

Another provision required the company to supply water free for certain municipal uses. Street sprinkling was not enumerated among these but in 1877 the city refused to pay for water used for this purpose. The company thereupon shut off the sprinkling hydrants and the city took forcible possession of them. A suit resulted and the court held that street sprinkling is irrigation; that the company could make no charge for water supplied for irrigating, as the city had reserved to itself



the exclusive right to dispose of the river water used for that purpose; and that as the water in the pipes was river water, the city had the right to take it when found in excess of domestic requirements. As to this last limitation, the city has never observed the court's ruling very closely, as it has taken the water in many cases without regard to the requirements of consumers. This however is the fault of the company, for it is required by the lease to erect fire hydrants at every street intersection along the mains, and it is of course to be presumed that the pipes will be of sufficient capacity to supply the hydrants. A sufficient supply for the hydrants would be ample for street sprinkling. But at least half the pipes were too small to carry an adequate supply.

When the Water Company secured this lease it obtained an absolute monopoly of the domestic water supply, during the life of the lease. It has the right to take all the river water it needs, for an annual rental of four hundred dollars. The rental was originally fifteen hundred dollars for ten inches of water. But for an insignificant consideration this was reduced to four hundred dollars, and the proviso was made that whenever more water was required by the company permission should be obtained from the City Council. No permission has ever been granted the company to take out more than the ten inches allowed by the lease, but it has taken at times as much as fifteen hundred inches.

While the Water Company has no exclusive right to lay mains in the streets, there has never been a shadow of danger of competition, as the Los Angeles river is the only available source of supply and the city, while resting under obligation to purchase the existing plant, could not afford to give the use of this water to an opposite company.

When the Water Company received its lease it went to work in good faith,

and spent \$75,000 of its own money in laying cast iron pipes and constructing an earth ditch from the old city reservoir to a lagoon in the old river bed, this lagoon being styled by them the Crystal Springs. This ditch was seven miles long and brought the water by gravity to an average elevation of about eighty feet above the built-up portion of the town. This lagoon did not supply water enough to meet the loss from seepage, and the river was tapped. The growth of the city made extensions necessary and for a few years the company used the net revenues for that purpose, instead of paying dividends and assessing the stock. If that policy had been continued, the works would be to-day such as a more enterprising corporation would have made them. The consumers have paid this company enough money to build a first class water works plant for the city and still leave a handsome margin for dividends. Fully two thirds of the plant was built from water receipts, and if half what has been paid in dividends had been left in the plant the city would not now be buying one hundred and fifty miles of scrap iron in the shape of two and three inch pipes, which they will have to replace soon after getting possession of the works. In view of the fact that the consumers virtually built the water works, they should at least have had value received in the shape of an adequate means of supply.

In 1885 the consumption of water was overtaxing the earth ditch and the company constructed a wooden conduit of greater capacity from the reservoir to the Crystal Springs on a less grade than that of the ditch, so as to tap the underflow of the river about twelve feet below the surface of the ground, the stated object being to secure filtered water. The surface water of the river is subject to contamination from stock grazing along its banks and from the decomposition of vegetation, and this move on the part of the company was commended by the people, as they be-



gan to think that the company was at last waking up to the fact that it had for years been disregarding the health of the consumers and now intended to make amends by giving them pure water.

The peculiarity of this river is that its surface flow is supplied in its entire length from water flowing in the sands which extend to a great depth beneath. There are no surface tributaries which extend beyond the limits of the storm channel. The infiltration into the galleries, or bleeding pipes, laid in this river bottom, is from waters that have not seen the sunlight since their precipitation. If these drains are sufficiently distant from the stream there is no need to draw from the surface flow, and there will then be no interruption to the constant operation of the filter by the clogging of the pores. This condition is the explanation of a filter that costs nothing to keep it filtering. The company spent about \$30,000 in trenching and drain pipe, from which a continuous flow of between six and seven million gallons per diem was obtained.

After these pipes had all been covered over, and there was no visible connection between the surface flow and the water discharging from these drains, the company conceived the idea that this water came from some distant and unknown source, and therefore could not have any connection whatever with the river. They verified this dream to their own satisfaction by having the river measured above and below the drains, though this proved nothing even if a loss in the surface flow had been discovered, as the drains were only calculated to intercept the underflow and prevent its rising to the stream, as it certainly did before the drains were laid.

The rapid growth of the city was making the water works a very desirable property and a bright future was tempting the owners to perpetuate their hold beyond the term of lease. So exclusive did they desire to be in

the possession of this fine property that they organized themselves into what is known as the Crystal Springs Land and Water Company. This company was capitalized for exactly the same amount as the Los Angeles City Water Company, and the stock was parcelled out in exact proportion to the stockholdings in the latter company, the same officers and directors managing both companies. The purpose of this juggle was suspected at the time by the city authorities and subsequent developments proved these suspicions well founded. The object was to get the ownership of the supply conduits, leading to the distributing system, away from the Los Angeles City Water Company, which was obliged at the termination of the lease to sell its property to the city. They would then control the only means of getting water to the distributing pipes and the city would be at a serious disadvantage. So great was their assurance of success that they openly boasted that all their moves for fifteen years had been made with a view to the checkmate which they considered certain.

As the Crystal Springs Company had no legitimate means from which to derive an income, and as its members were not in the habit of going into their own pockets for investments of this character, the Water Company came to the rescue by paying, out of its water receipts, a rental of \$100,000 per annum. This money was paid by the Water Company for the privilege of running through its pipes the water for the use of which it was already paying the city \$400 per annum. The rental paid to the Crystal Springs company was spent in building and acquiring conduits that were to be used as a club to beat the city into submission to their demand for a continuance in possession of the works. This auxiliary company was also a great convenience to the officers of the two corporations in making the statement of receipts and expenditures which water companies are re-



quired to file each year, the concealment of the Water Company's large profits being greatly simplified.

When the city authorities became fully satisfied of the purpose of this scheme, they brought suit against the Crystal Springs company to recover the rents paid to it by the Water Company and to restrain it from taking water that, if not diverted by underground pipes, would flow into the Los Angeles river. The city was non-suited as the secretary of the twin companies testified that the Crystal Springs company was not taking water but was only leasing its pipe to the Water Company, which had a right to the water under the lease from the city. This suit was first agitated in 1886 and tried about five years later. About a year and a half ago the matter was again taken up and a suit was brought by the city to quiet title to these filtered waters. The case was presented with elaborately prepared testimony of an engineering character, showing many physical demonstrations that had been made at great cost. After six weeks of stubborn fighting in court, the case was continued for argument and there it still remains.

After the Water Company's intention to put the city at a disadvantage became well known, the Council of 1892 thought it advisable to anticipate the company's action by providing the city with a supply conduit of its own. So they ordered plans to be made for building a conduit in what is known as the main supply ditch, which diverts water from the river at a point above the Water Company's head works. These plans contemplated taking the water out by means of infiltration galleries, which were to have a capacity that would absorb the entire flow of the river. Bonds were voted for the purpose, to the amount of \$526,000, and in spite of the opposition of the entire press and the lavish distribution of the Water Company's money among the purchasable class of voters, the election resulted in favor of the bonds about six

to one. The Water Company took the matter into court, and the bonds were set aside because, pending the proceedings, the Legislature had extended the time of payment of the bonds from twenty to thirty years.

The building of these headworks and infiltration galleries necessitated the acquisition of about four hundred acres of river bottom land, and a purchase price of \$30,000 was once agreed upon between the owner and the city, but through some influence the Council failed to close the deal. The owner afterwards refused to sell at this figure and suit was brought to condemn the land. This suit, which is known as the Pomeroy Hooker case, was prepared and presented with elaborate engineering testimony on both sides. The case was hotly contested in court for four weeks and the jury gave an award of \$25,000 as the value of the property. The expenses of the suit to both parties amounted to nearly this sum. On appeal by Pomeroy and Hooker to the Supreme Court, the decision of Judge Lucien Shaw, before whom the case was originally tried, was sustained in nearly every particular. The decision favored the city in every point that affects its rights to both the surface and the underflow of the river.

The next step taken by the city was to ascertain the actual value of the company's plant, and the City Engineer was instructed in 1893 to make an estimate. The company refused access to some of their books and the Engineer had to dig down on many pipes in order to ascertain their size and condition, and considerable measuring was required. This work was at best only a close approximation, but it revealed the fact that the works were very much overestimated by their owners. Nothing resulted from this move, as the company got into a complication about this time with some eastern promoters, who had induced them to go into a scheme to unload the stock on the gullible public. This project failed and after a few



years the company was again free to open private negotiations with its old friend, the city. The lease had then about two years to run, and it was thought on both sides that a private understanding could be reached that would be satisfactory to all concerned. But the stockholders had been drawing dividends so long on a good fat capitalization that they had formed an exaggerated idea of the value of their property, and when the city asked that the City Engineer be permitted to make a complete inventory of the plant, the company did not hesitate to allow it. The City Engineer made a very elaborate and complete estimate of the entire property, and to the surprise of everyone the valuation fell far short of what was expected. The disparity between the company's asking price and the City Engineer's estimate was so great as to make it impossible for the city to obtain such an amount of money as the company might have been induced to accept, as a compromise. The company was entitled to about half a million over the Engineer's estimate for the two unexpired years of the lease, and the city would have given this, which would have made the purchase price about \$1,750,000, but the company held stiffly to \$2,500,000 and the negotiation was abandoned.

Just prior to the expiration of the lease an attempt was made by the company, through other parties, to obtain a new lease for fifty years, on terms that were even more obnoxious than the existing ones. A great effort was made by the promoters to manufacture public sentiment in favor of this proposition, and for a time it seemed as if some headway was being made. The course taken by the promoters of this scheme was to intimidate the people by threatening them with endless litigation if they did not stand and deliver. An opposition was soon aroused which could not be terrorized by these threats, and the Council stood firm in turning the proposition down.

The city authorities had by this time arrived at the conclusion that the matter must be settled in the courts, and preparations were made by the legal department to meet the issue when the time arrived.

An inventory was first obtained from the Water Company showing all the property belonging to it, which the city was obliged, under the terms of the lease, to take over. This list of improvements did not include any of the property held in the name of the Crystal Springs company and was therefore an incomplete system of water works, as the pipe system had been deprived of its means of supply. A portion of the old earth ditch, a short length of 44-inch iron pipe, and a portion of the old wooden conduit which had become well rotted, comprised the only means of supply that the company would include in its inventory. It had a capacity of only about one third the consumption. The company was resting easy in the belief that the city would not undertake to terminate the lease and take possession of the works with this limited and uncertain means of supply.

The matter had now reached a critical point. The city authorities were undetermined as to their future movements. They had either to take the water works without the means of getting water to them, or to be tied up for an indefinite period in litigation with the Crystal Springs company. This company was asked to name a price at which it would sell its conduits and reservoir, reserving the right to buy it back at the same figure in case the courts should give the company title to the water it was claiming. The company refused this but offered to lease its conduits to the city for a term of three years at an annual rental of \$100,000. The Council would not submit to this extortion and decided to get some engineering advice on the possibility of getting a water supply in some other way. Fortunately for the city



the engineers found a way out and the company's deep laid scheme, which it had taken fifteen years to formulate, was knocked out in a night. Upon the advice of the engineers the city decided to accept the inventory and provide for the deficiency in water supply from other resources at the city's command. While preparations were being made by the city to take possession of the works on the day the lease expired, the company was also taking steps to prevent such action. The company obtained an injunction restraining the city from taking possession, and the city asked for a receiver for the company, which was granted although the receiver was afterwards removed by the Supreme Court on the ground that his appointment was premature and unnecessary.

The Council then made the company a final offer of \$1,000,000 for the property included in the inventory, or \$1,300,000 for the entire plant of both companies. The Water Company made a counter demand of \$2,000,000 for the property of the Los Angeles City Water Company and \$1,000,000 for the Crystal Springs Company. The Pomeroy-Hooker decision had not been rendered at this time, or the company would have been more modest in the latter demand, as the only value in the Crystal Springs property is in the conduits and reservoirs, which cost about one quarter of a million dollars. The \$750,000 bonus which they charged was for an imaginary right to the water, which their secretary once swore was taken by the Los Angeles City Water Company from the river, and for which the latter company was paying the city the annual rental of \$400.

The time had arrived for the appointment of the Board of Arbitrators and the city selected Mr. James C. Kays, who appeared to be satisfactory to all parties. The company selected Capt. Charles T. Healey. These two gentlemen had some difficulty in agreeing on the third man, but after two month's

investigation into the qualifications of the various names suggested, they decided upon Col. G. H. Mendell of San Francisco. Both sides were represented before the Board by able attorneys and engineers, who made thorough investigation of the plant and estimates of its value. The value of the property scheduled as belonging to the Los Angeles City Water Company was all that the Board was to determine. After several months' examination the city's engineers found that the plant could be reproduced, new, at that time, for \$1,350,000, but their estimate for depreciation reduced its true value to about \$1,000,000. The company's engineers managed by some ingenious juggling of figures to get the value up to \$2,500,000. The majority of the Board, after due deliberation, fixed the value at \$1,183,591.42. The company's arbitrator dissented from this decision and the company brought suit to have the award set aside on the grounds of being unfair and of not having received the unanimous support of the entire Board. This last reason is based upon a very literal interpretation of the language of the lease, which says that a decision of the three arbitrators shall be final. A unanimous decision could scarcely be expected unless all three men were chosen by one party to the controversy.

The award was accepted by the city and plans and estimates were ordered for a conduit to bring the water through the supply ditch to the city, where it could be carried into the distributing mains. This estimate was completed about a month later and an election was called to vote on the issuance of bonds amounting to \$2,090,000, which covered the amount of the arbitrators' award, and the cost of constructing the necessary headworks, infiltration galleries, conduit, reservoir and mains to connect with the distributing system. The Water Company made an effort to defeat the bond issue by publishing misleading statements, which were accepted by the press only in the form of



advertisements, and by distributing hand bills. The grafting fraternity was also employed to manipulate the election, but the result of the vote was eight to one in favor of the bonds.

The company is now making its last stand by bringing suits with a view of clouding the validity of the bonds so as to prevent their sale. They are to be placed on sale at once, and if there has been no irregularity in the proceedings they will find takers, as the credit of the city is good. When the city secures the money and has made tender of the amount of the arbitrators' award, the

last condition imposed by the lease upon the city has been complied with, and it is up to the company thereafter.

I will not attempt any predictions on the outcome of the controversy, beyond the statement that the city has the right on its side and will in the end win out. No company, giving so little for the money it received, was ever treated with the consideration that has been shown to the Los Angeles City Water Company.

FRED EATON,  
Mayor of Los Angeles.

## The Sequoia National Park.

BY BEN M. MADDOX.

THE Sequoia National Park and the Sierra forest reserve adjacent thereto, situated in Tulare county, will become the most famous health and pleasure resort in California. The park is situated on the western slope of the Sierra Nevada mountain and is 24 miles long by from 6 to 12 miles wide. It consists of seven townships, each six miles square. The act creating the park was signed Sept. 25, 1890, and the object of its establishment was to preserve forever the Giant Forest, which contains more big trees (*sequoia gigantea*) than all the rest of the state combined, if we except the groves in the southern portion of Tulare county on the Tule river.

Prior to 1890 the Sierra Nevada mountains were used principally as a range for sheep, and as early as 1885 many of the best meadows were located under the swamp land act and titles obtained. In the fall of 1885 forty claims under the timber act of June 3, 1878, were filed in the Giant Forest. Subsequently many of the claimants formed themselves into the Kaweah Colony and preparations for sawing lumber, building a hotel and other work was begun. The most important project was the building of a road up the north fork of the Kaweah

river to Giant Forest. This work was prosecuted with vigor and under the most trying difficulties. When the attention of the public was aroused to the importance of protecting the water shed of the San Joaquin valley from destruction by sheep and to the preservation of the forests, the Sequoia Park was established and the Sierra Forest reserve was set aside by order of the President. This destroyed the Kaweah colony and the magnificently graded road they built up the Kaweah river, at a cost of \$63,000, has since been totally neglected by the government.

The Sequoia Park has been under the control of the interior department since its creation and regular army officers have been detailed to act as superintendents. The official reports of these officers are filled with well written descriptions of the beauties of Giant Forest and the reserve, and they have all recommended that an appropriation be made to repair the old colony road and extend it to Giant Forest, and also to construct necessary trails to make the park accessible to tourists. At the last session of congress Congressman Castle and Senator Perkins tried to get an appropriation, but the excitement attending the war with Spain and the immense sums required to prosecute the



war made their efforts unavailing.

This spring the Visalia Board of Trade determined that the time had arrived to make the beauties of the Sequoia Park known to the world, and in order that congress might be placed in possession of absolutely reliable information concerning the need for appropriations to build roads and trails, an invitation was extended to Congressman J. C. Needham of the seventh district to be the guest of the Board on a camping

mountains and canyons may prove interesting to the readers of CALIFORNIA MUNICIPALITIES.

But first a word about Giant Forest. It occupies an area of three miles square on an elevated plateau east of the Marble Fork of the Kaweah river, 57 miles north of east of Visalia. It is estimated to contain more than three thousand sequoias whose circumference will exceed fifty feet and which tower more than 300 feet above the ground. The



*"General Sherman," the big tree in the Mammoth Forest.*

trip through the mountains. In addition to Mr. Needham a representative of the Southern Pacific company and also of the Santa Fe company were invited, and on the 5th day of July the party left Visalia and twenty-five days were spent in exploring the wilds of the Sierras. The writer was one of the representatives of the Board of Trade on the trip, and as the country is practically unknown a description of the

General Sherman in this forest is the largest tree in the world. At its base it is 100 feet in circumference and five feet above the ground it measures 84 feet, 3 inches in circumference, and this size is maintained for probably 200 feet. Groups of six to a dozen trees, 60 to 75 feet in circumference, are frequently found. The tallest measured tree is 405 feet high, while one fallen monarch 310 feet in length, reaches entirely



across Crescent meadow. In one of the burned trees there is a space 11 feet by 6 feet 7 inches, and twenty-two people can stand shoulder to shoulder around the inside. The altitude of the spot where the General Sherman stands is 7100 feet and the forest will range from 6500 to 7400 feet in elevation. The other trees growing in the forest beside the sequoia gigantea are: Sugar pine, silver fir, cedar, yellow pine and Douglass pine. They all grow to immense size and are veritable monarchs of their kind. With the Kaweah colony road completed to Giant Forest and taking that as the central point for the development of the Sequoia Park, we ask the readers of CALIFORNIA MUNICIPALITIES to consider the attractions that will be offered to tourists and camping parties.

In the first place there are so many sequoias that it will take miles of road to permit of their comfortable inspection from a carriage. The country is sufficiently rolling to relieve such a ride of monotony and yet not mountainous enough to make it dangerous or even tiresome. From Sunset rock,—a splendid site for a hotel—it will take about fifteen minutes to reach Moro rock, which stands on the southern boundary of the park and is a natural observatory for the entire middle fork of the Kaweah river canyon and the country north of Mineral King and as far westward as the eye can reach. It is large enough to merit companionship with the sequoias and the 2000-foot perpendicular view that can be obtained from its summit presents dangers enough to satisfy the most hardy mountaineer. The ride to, and ascent of, Moro rock, will be one of the star attractions at the Giant Forest in years to come. Panther peak is farther up the canyon and will also be a popular point of interest.

With the single exception of the tavern at Glacier point at Yosemite valley, there is no hostelry in California that will have such a magnificent location as the one to be erected at Sunset rock.

The altitude is 6650 feet and the giant trees grow almost up to the very edge of the immense granite rock, which is 300 by 200 feet in size. This rock is situated on the east side and at the top of Marble fork canyon, and 1500 feet (in altitude) directly below it flows the stream, as clear as crystal and alive with rainbow trout. To the southwest the Kaweah valley spreads out, showing a multitude of hills and gorges, and far beyond the great and productive San Joaquin valley, when the atmosphere is not very clear, looks like a mighty ocean. The young, the old, the indolent and the sick can enjoy the ride among the trees, admire the hills and meadows, visit Moro rock and Panther peak, catch fish in the Marble fork and watch the sun sink to rest from Sunset rock, but for the adventuresome there will be glorious camping trips that cannot be duplicated in this great state of natural wonders.

The places that can be visited from the Giant Forest are Kings river canyon, Alta peaks, Panoramic Point at Alta meadows, Mineral King and its grand mountains, little and big Kern rivers, Kern river canyon, Mt. Whitney, Golden Trout creek and the many points of interest along the route. The trails were not built by men who had in mind the comforts of pleasure seekers, but were laid out along the lines that offered the least resistance. Most of them were intended for temporary use only and look as though they were surveyed by some cattle man while trying to round up a wild calf. However, they are not dangerous to travel. On the recent camping trip of the board of trade there were twenty-three horses used and not one of them was hurt in going over a distance of 300 miles.

Panoramic Point is four hours' ride over the present rough trail from Giant Forest. Here is a mere outline of what the Visalia Board of Trade camping party saw from Panoramic Point: On the north, the Alta peaks, probably 12,000 feet high; north of east, the



head of Buck canyon; east, the high jagged peaks where the middle fork of the Kaweah has its source, were seen above the clouds; south of east the Kaweah peaks, 14,145 feet high, were bathed in the golden rays of the sinking sun, while east of south Saw Tooth peak was standing guard over the Mineral King range. Mt. Needham and Farewell Gap could be seen almost directly over Timper Gap and southeast the Castle rocks looked grandly beauti-

eah could be observed from their junction 4000 feet below to their source, while 3000 feet immediately below us and at an angle of probably 80 degrees the waters of Buck canyon were dashing along to mingle with the Kaweah. For twenty miles the Kaweah could be seen winding its way towards the plains in a westerly direction, there being a difference in altitude of 8000 feet from where we stood and where the river faded from sight. Green meadows



*Summit of Mt. Whitney.*

ful. South of west Panther peak and Moro rock sentined the Giant Forest and a thousand feet below the point where we were standing the Sugar Loaf and Little Blue looked like huge granite foot-stools.

Over at Timber Gap Deer canyon was in view its entire length and the precipitous Cliff canyon that winds its tortuous way north of Saw Tooth could be traced for many miles. Granite Creek and the middle fork of the Kaw-

and patches of snow dotted the various canyon sides, and ribbon waterfalls were glistening in every direction. Granite domes, spires and columns in countless numbers gave variety to the scene. The hills and mountains up to the timber line were covered with trees, ferns and wild flowers of every hue and the sinking sun, throwing deep shadows into the canyons, made an impression on every beholder that words cannot describe.



From Panoramic Point it is an eight hour ride to Mineral King and from there to the lakes on the Kern river two days are usually consumed in making the trip. The little Kern and its tributaries are considered the best fishing streams in the mountains and the sportsman can catch as many trout there as he desires. The Kern canyon is pretty well known for probably ten miles above the big lake, but the absence of a trail above the Funston meadow shows that but few people ever venture beyond that point. The ride up the canyon is destined to become famous, however, and in connection with the trip to Mt. Whitney, will be the one most patronized by the future tourist to Giant Forest.

The Kern canyon runs almost due north and south for thirty miles. The valley is from a half mile to a mile wide, and huge tamaracks and pines, with an occasional meadow, covers the ground. At the lower lake the altitude is 6300 feet, and twenty miles above, where the board of trade camping party left the canyon, the altitude is 9000 feet. The canyon walls for the entire distance will range from 3000 feet to 6000 feet high, and behind these the Kaweah peaks, Mt. Whitney and other big mountains loom up among the clouds. After leaving Funston's meadow quite a number of beautiful waterfalls are seen. The Chagcopah falls are the grandest and for 3000 feet the water is dashed to spray as it leaps from one rock to another. There are six ribbon waterfalls from 2000 to 3000 feet high in the space of four miles, four on the west wall and two on the east wall of the canyon. We stopped early enough on the 13th of July to note the time the sun quit shining on the camp and the last rays vanished at 3:20. It was 8:30 the next morning before the sun made its appearance, and our camp was at an elevation of 7000 feet.

In places the walls seem almost perpendicular and of solid granite, and then they are broken into all sorts of

fantastic shapes. The great variety of scenes in Kern canyon is its chief charm. The eye never tires, for some new beauty is constantly discovered. The river is alive with trout and at Junction camp we found that the fish would bite in the middle of the day when the sun was shining directly on the clear pools. The Kings river canyon proper is about five miles long and the walls rise to a great height with very little to relieve the eye. The Kern canyon is thirty miles long, the walls are just as high as they are in the Kings river canyon and the great diversity of scenery and the superior fishing are certain to make it the most popular resort.

The trip out of the canyon to Mt. Whitney had to be made for almost the entire distance without a trail, and for the first mile at an angle of 45 degrees. When we reached an altitude of 10,800 feet we got the first glimpse of Mt. Whitney, Mt. Tyndall, Mt. Williamson and the high peaks surrounding them. From the same place we could look down the Kern canyon for twenty-five miles, while across the canyon the Kaweah peaks were seen.

We started to climb Mt. Whitney at 6 o'clock in the morning and reached the summit two hours and three quarters later. There would be no difficulty in building a trail so that the trip could be made on horseback and some of these days such a trail will be built. Our aneroid showed the altitude to be 15,000 feet and the light air was convincing testimony that we were on top of the United States. The panorama from the top cannot be described. Mt. Tyndall 14,360 ft. high and Mt. Williamson 14,448 ft. high are due north, Mt. Brewer 13,886 ft. high, northwest by west, Table Mt. 13,981 ft. high west by west, Kaweah peaks 14,141 ft. high southwest by west, Sheep mountain 14,094 ft. high southeast, Owen's lake east by south, Olancho peak 13,390 ft. southeast, Owen's valley east, Kern river canyon to the west, extending north and south,



Sawtooth 13,300 ft. and Mt. Needham to the west. To the northeast the White mountains could be seen and all of the peaks where the Kings and Kern rivers have their rise were plainly in view.

The greatest view in Yosemite valley is obtained from Glacier Point where one can stand and look down into the valley below for 3200 feet. Just come with me to Whitney and look down from its summit to Lone Pine. It is so far that you can distinguish nothing

Giant Forest to Mt. Whitney by way of the Kern canyon, and probably one day less to return via Golden Trout creek. There is but one place in America where golden trout can be found and this will be a wonderful attraction to tourists. The meadows along this creek are all that could be desired. There is plenty of wood, the water is cold and clear and the feed abundant. The golden trout are plentiful and are easily caught. The old volcanoes to be



*Kings River Canyon.*

with the naked eye, but take a glass and you can trace the line of trees and see something that may be houses. It is 11,000 feet down to Lone Pine. Is there a place on earth that can duplicate such a scene? How many people would make the pilgrimage from Giant Forest to the summit of Whitney if they knew such a magnificent sight would reward them for the labor and expense?

It will take about six days to go from

seen along the south side of the creek, with their red tops and sides, make a pretty picture and probably furnish a clue from which to discover the cause for the golden colored trout.

From Giant Forest good trails could be built so that ladies and children could make the trip to Panoramic Point, Kern canyon, Golden Trout creek, Mt. Whitney and back by way of Kings river canyon. There is nothing to prevent the building of wagon roads the



entire distance, except a lack of money, and when the beauty of the country is thoroughly understood we do not think this will be difficult to obtain.

At the coming session of congress, Hon. J. C. Needham will ask for an appropriation to repair the Kaweah colony road and extend it to Giant Forest. He will also ask for appropriations to build trails to the various points mentioned above and which can be more easily reached from Giant Forest than from any other place. When the road to the forest is completed it will only require a stage ride of seven hours from Visalia to reach Sunset Rock. Is there a municipality in California that cannot afford to help this good work along? Take all the mountain and coast resorts in California and together they do not contain as many points of interest as are found in the Sequoia National Park and the Sierra forest reserve. Yosemite Valley has brought hundreds of thousands of dollars to this state, and when the Sequoia Park is properly developed and advertised, tourist travel to this coast will be multiplied ten-fold.



### **Bacteria as Destroyers of Masonry.**

*Scientific American.*

Bacteriology has shown how we may count alike upon friends and foes among the myriads of bacteria known to us, says *The Lancet*. The friendly species, however, are decidedly in the ascendancy, but comparatively few pathogenic organisms having been isolated and recognized. Recent researches have shown how important is the role of the bacterium in many industrial processes, especially where the production of articles of food is concerned. Ascertained facts would seem to teach that bacteria after all may serve us as tiny engineers who can perform stupendous work when associated in myriads, so long as they are placed under a favorable environment. The disposal

of sewage by purely bacterial agencies, which under suitable conditions convert an offensive material into simpler and innocuous materials, is perhaps the best case in point. But the disintegrating action of bacteria, though perhaps an indirect one, must, according to recent observations, be reckoned with as a source of mischief. At first sight it would seem hardly possible for bacteria to be concerned in the breaking down of a stone wall, yet such would appear to be the case, according to some ingenious observations directed to the nature of the decay of cement. The gradual disintegration of the cement mortar used in water supply reservoirs is one of the serious troubles met with by water engineers, and a trouble which so far they have not been able to avoid with any measure of practical success. Hitherto this action was supposed to be the result of the solvent property of carbonic acid and other mineral substances commonly present in a water supply. The cement gradually disintegrates and becomes a kind of mud which slowly detaches itself. This strange process is due to the action of none other than that bacterium known as the nitrifying organism. An examination of the mud shows it to be teeming with these organisms. The organism, however, cannot flourish in the absence of nitrifiable pabulum. In its presence, however, nitrous acid is produced, which leads most probably to the disintegration of the cement lining of the water reservoir. The nitrifying organism is the one upon which so much depends in the purification of sewage and effete matters. On this account its growth should be encouraged, and it is curious, therefore, to find that the organism appears as an objectionable factor in the attempt to supply and store an abundance of pure water for drinking purposes.



### Electric Lighting Contracts.

At the recent meeting of the Association for Municipal Improvements, held at Toronto, the Com. on electric street lighting, Mr. D. Hunter, jr., chairman, submitted a report, of which the following is the most important part and is reprinted from *Municipal Engineering*:

"Your committee desires to call your attention to what it considers more or less improper methods prevailing in the matter of contracts existing between municipalities and lighting companies for the lighting of the public highways by means of the electric arc lamp. The existing form of contract calls for a certain type of lamp, commercially known as being capable of rendering 1,200 or 2,000 candle power, using power to the amount of 330 and 480 watts respectively, operating under normal conditions, and for which the municipality agrees to pay a fixed price per lamp per annum, same to be in service a fixed number of hours. With the above form of contract it is possible, and in many cases probable, that the current furnished to lamps will be very much reduced, the company thereby economizing in fuel, carbons and apparatus, while the municipality suffers a corresponding loss in illumination, and, as a natural consequence, complaints come from the public to the city officials, claiming the light is poor and it is not getting what it pays for.

"Another matter requiring some attention is that of the adjustment of outages. In the present form of contract it is customary for the company to allow a rebate (corresponding to the contract price) for all lamps not burning. This has the appearance of being fair to all concerned, but many outages occur that escape the notice of the municipal officials, even under the most rigid methods of inspection, and all such leaks must be borne by the municipality.

"Your committee is of the opinion that the troubles mentioned may be re-

moved entirely by the adoption of the meter system, under which you will pay only for current used. The contracting company being in the business to sell current, will then find it to its interest to maintain normal current on its street lighting circuits and take better care of lamps in order to reduce outage account. The best service within the power of the company to render will then be obtained by the municipality, with but slight effort on the part of the latter.

"With the adoption of the meter system it would be necessary for the representative of the municipality to have access to the meters operating in street lighting circuits, enabling him to take two daily readings of each street lighting circuit watt meter, one reading previous to lights on, and one at the time lights are cut off.

"Knowing the number of lamps on each circuit and wattage of same, daily comparisons should be made between meter readings and approximately-known circuit wattage, and it will then be possible to discover at once any considerable error in meter and have same rectified immediately. In making the above comparisons it is, of course, understood that allowance must be made for line resistance, making, say two miles of circuit of average construction the equivalent of one arc lamp. In other words, a circuit ten miles long, operating sixty arc lamps, may be computed for wattage as having sixty-five lamps in circuit. In ordinary practice the above will be found approximately correct. All meters should be calibrated monthly.

"All other details in contracts may remain as at present, including that of rebate for outages, except that the contract might concede a fixed percentage of same, and anything above that should be charged against the company, at such rate as may be determined in contract, provided all such excess outages might have been prevented by the exercise of proper care.



"The meter system will necessitate closer observance in the matter of supervising the lighting of the city, as it will prohibit the joint operation of public and commercial circuits.

"A question naturally arising in the event of the adoption of the meter system is that of price per kilowatt hour for current used under existing service. It would probably be as well to leave this unanswered, knowing as we do that local influences and conditions control these matters, as may be seen by referring to tabulations embodied in this report. However, comparison may be made as follows: An arc lamp using 9.6 ampere current at 50 volts (2,000 candle power so-called) consumes power at the rate of .480 kilowatts, for which the average cost is 2.81 cents per lamp hour as per tabulation of seventy-eight cities under contract, or at the rate of 5.85 cents per kilowatt hour.

"Average cost per 2,000 candle-power lamp hour, computed from twenty-five electric plants owned and operated by municipalities is 2.17 cents, being equivalent to 4.51 cents per kilowatt hour. Interest, depreciation and insurance are included in municipal plant cost of service.

"To those desiring to make detailed investigation of the cost of electric plants and service from same the reports of the cities of Detroit and Allegheny may be found valuable."



### **The Laying Out of Cities.**

Every condemnation of land, every commission appointed for street opening are forceful admission that mistakes in the designing of our centers of population have been committed. They are like the operations of the surgeon, heroic applications to correct shortcomings contracted in times past.

How can we avoid such and attain the same end, and that in more pleasant and far cheaper ways?

Let us consider the origin of most of our towns. Let us overlook the settle-

ments brought about through manipulation of deals, be it the locating of a railroad crossing and of machine shops, be it a settlement of factory hands clustered in great numbers near mills. I allude here to the nucleus of our California cities originating from the tenting cover of the prairie schooner. Near the farmhouse located the blacksmith shop, across the way the saloon and other buildings came in quick succession. New roads began to be laid down and soon a town is before us. Its lines of communication are mostly right, and taken in connection with the network of cow trails and hay roads, wood tracks and pathways, they give us the unobstructed lines of fitful progress. But in how few instances have these lines been adhered to? Was not the mere division through a wire fence sufficient cause to divert these channels? And have not in further arrangements raise and fall of creek and canyon been entirely disregarded? Let us be aware that only in those few instances where natural obstructions of hillsides or river beds caused a permanent draining of all travel in just those main and water streets of every mining camp, that only in those few cases of slow development the original centers of trade have remained. In all other instances the trade and retail quarters shift. It is, therefore, hardly of vital interest whether those original lines were doubled in dimensions as trade and traffic increased, if only the further designing was done on broad lines.

It is a decidedly troublesome fact that every land holder who divided his area into town lots and streets has, up to this date, been permitted to do such in a manner entirely to his personal liking. And that is the chronic ailment which obstructs the ideal development of every single city. We do not deal with settled conditions of centuries past, with sacred ground endeared to present generations through intimate connection with noble history. We Americans can bring forth only the one

explanation, that we failed to grasp the absolute necessity of subjecting the settlement of any community to a pre-conceived plan.

Town meetings of a board of trustees are not apt to call for wide attention. Yet, in this time where civic development takes on such rapid strides we ought to awake to the fact that such ways of adopting a plan for the University of our State are the ideal which every hamlet should aim at. The quickening methods adopted there can be followed with ennobling spirit by the town board of any village when refusing to add one single acre of land to its jurisdiction, it will be then that its every alley and lot subserves one plan laid down for the good of the settlement at as early a date as possible. How can such plans be secured?

The wacry of 'civil service rule' sounds so thoroughly reforming that we forget that it means nothing but the application of methods which we employ at every hour. Expert service, divided labor, is the only way to advance towards ideal conditions. A private party may pursue cheap methods and persuade himself that a patent medicine is as good as a doctor's prescription. But a community, involving the life of generations, is bound to adopt the way of the wise woman who receives calls from the family physician be the baby ever so healthy.

It is with the progressive citizen to realize how we can provide for the future and earn the gratitude of the coming generations, by adopting a plan for the outlay of our settlements. And it is for the League of Municipalities to stamp of approval upon such methods when they demand the passage of a law which compels every addition to the maps of our towns to conform to the ideas adopted for the entire settlement.

GEO. HANSEN.

### Regarding Sewer Ventilation.

Rudolph Herring, an eminent sanitary engineer of New York, has just completed an inspection of Los Angeles' sewer system, with a view of determining the cause of the disintegration of the outfall sewer and the application of a preventative thereof.

In an interview published in the Los Angeles *Herald*, Mr. Herring speaks as follows concerning the care of sewers:

"The main thing with the sewers is to keep up a good ventilation. People living near manholes may say that they are troubled with odors arising from the sewers, but that simply shows that the sewers are not in good condition. People give their parlors, which are the cleanest places in their houses, a thorough cleaning occasionally, and if the parlors need cleaning, certainly sewers, which are the dirtiest of places, have equal need of it. One cannot say just how often your sewers should be cleaned, but certainly as often as once a month. I should say that you were using plenty of clean water for ordinary uses, but flushing does not require clean water. The sewers should have flush traps, or doors in the sewers, which would back up the sewage until it gets under some pressure, and then allow it to escape suddenly. Under such a system, which is common in Europe, the sewers could be kept clean enough to prevent the escape of offensive odors. There may be exceptional cases where it is desirable to seal the manholes, but as a general rule all the circulation of air possible should be provided for the sewers.

"This is especially true here, where you have the peculiar experience with your outfall sewer. I have not seen that, but from all accounts it would seem to be certain that the gases are responsible for the disintegration of the cement. You can figure that out as well as I can. The cement under the water is solid, while that exposed to the air is crumbling. Now, if you shut off the circulation of air, you are simply increasing the evil that exists."



### The League Convention.

The second annual convention of the League of California Municipalities, at Pioneer Hall, San Francisco, on Dec. 13, 14 and 15, promises to be a largely attended meeting. Assurances have been received from a large number of municipal officials that it is their intention to attend. From many of the nearby cities the city officials will attend in a body. Most of the more distant places will endeavor to send one or more representatives. It is estimated that sixty or seventy municipalities will be represented.

Much interest will probably be developed in the fixing of a program for the future. The nature of the work to be done by the League for the next year will be outlined.

The two main questions for discussion will be "Street Improvements" and "Municipal Water Works." These ought to call forth some valuable suggestions and experiences.

David Starr Jordan, president of Stanford University, will occupy the platform on the evening of December 13. Prof. Jordan always says something worth listening to.

The program for the evening of Dec. 14 has not yet been fully completed. It will, however, consist of short addresses on subjects of municipal interest.

The matter of deciding upon the place of holding the next meeting will probably be decided upon. A number of cities have been mentioned in this connection—Santa Rosa, Stockton, San Jose, Fresno, Los Angeles and others.

The following is the program for the meeting:

#### PROGRAM.

Wednesday, Dec. 13, 2 P. M.

- 1 Roll call of Delegates.
  - 2 Address, Pres. J. D. Phelan.
  - 3 Reports of Officers.
  - 4 Subject—"The future work of the League."
- Mayor Snow, Oakland.  
Mayor Brooks, Marysville.

Mayor Hutchinson, Palo Alto.  
Mayor Eaton, Los Angeles.  
Mayor Capps, San Diego.  
General Discussion.

5 Proposed Amendments to By Laws to be referred to committee.

6 Question Box.

Evening.

Address, David Starr Jordan.

Thursday, Dec. 14, 10 A. M.

Subject: "Street Improvement Acts."

15 minute papers by

F. K. Lane, San Francisco.

W. A. Beasley, San Jose.

George Pearce, Santa Rosa.

E. K. Taylor, Alameda.

B. A. Hayne, Berkeley.

City Attorney Haas, Los Angeles.

General Discussion.

Afternoon.

Subject: "Experience of Cities with Municipal Water Works."

T. H. Carr, Nevada City.

Mayor Sweet, Santa Rosa.

Mayor Lamb, Santa Cruz.

Mayor Druffel, Santa Clara, and others.

General Discussion.

Evening.

Fifteen minute papers on various subjects to be announced hereafter.

Friday, Dec. 15, 10 A. M.

Report of committee on amendments to by-laws and action on same.

Election of Officers.

Opening of Question Box.

Adjournment.

Afternoon and Evening.

Entertainment.



### Mr. Lamborn's Southern Trip.

Mr. B. F. Lamborn, member of the Executive Committee, spent nearly three weeks last month visiting the cities in the southern part of the state for the purpose of promoting the interests of the League of California Municipalities. In every instance the city officials interviewed expressed themselves as being in hearty sympathy with the purposes of the new organization and

ready to co-operate in the movement to establish an association for the practical purposes of improving the management of municipalities. Mr. Lamborn found that most of the southern cities were doing good work in municipal affairs. Extensive improvements had been made in a number of instances and others were preparing for new work next year. The officials are wide-awake, business men and the cities themselves furnish evidence that the progressive spirit is very well developed.



### The San Francisco Election.

CALIFORNIA MUNICIPALITIES extends its congratulations to Mayor James D. Phelan upon his re-election. The record that he has made during the past three years in connection with the administration of California's largest city has been exceptional. His labor in connection with the adoption of the city's new charter has been such as to entitle him to distinction. The adoption of this organic law was the installation of a complete outfit of new machinery with which to run the municipal government. It is wise that an experienced man has been chosen to superintend its operation.

The re-election of officials who have proven themselves to be faithful is also a matter worthy of remark. It has been demonstrated that he who performs his duty with uprightness and with fearlessness will be rewarded. Such evidence of appreciation cannot fail to produce a good effect upon all city officials, not only in San Francisco, but in all other cities. It will have a tendency to produce a crop of the same kind of officials all over the state.

Another good that will accrue as a result of the election is that which will come from the rebuke administered to those who attempted to inject party issues into the municipal campaign. As long as local politics are controlled by party politics, just so long will the party

boss be the controlling factor therein. Progress is not possible when the political boss is in control of the city. So the result of the San Francisco election is a victory for Progress.



### Sacramento's Election.

The municipal election of Sacramento occurred on November 8th, and the newly-elected officers are as follows: Mayor, Geo. H. Clark; Auditor, J. D. Young; Collector, C. C. Robinson; Treasurer, A. L. Frost; City Attorney, A. A. De Ligne; Trustees, R. E. Kent, John C. Ing; Jas. H. Devine, M. R. Beard; School Directors, E. J. Kay, J. A. Green, H. Mier, H. S. Ranson, P. S. Driver.



### An Improved Fire Lighter.

The automatic fire lighter attached to the new fire engine, made by engineer Patterson, has been improved by himself and it works like a charm, says the *Red Bluff News*. The construction is very simple and consists of a common ladle placed under the fire grate, a bottle of acid, a little powder, a shooting bolt, a chain, etc.

In the ladle is placed a quantity of flash light powder and a small bottle of sulphuric acid, and a bolt is so arranged that the moment the engine is moved forward it is driven with some force against the bottle, breaking it when instantly the acid and powder coming together a flame is produced, igniting the prepared inflammable kindling already arranged in the fire box. The driver now loses no time in first starting the fire by pulling the chain. He has but to drop and fasten the harness on the horses, jump into his seat, pull the door string and go, the first motion forward of the engine breaking the prepared weak spot in the chain, causing the shooting bolt to bring acid and powder in contact. The contrivance has been tried numerous times and has never yet failed to light the inflammables.



## Recent Court Decisions.

During the past month the Supreme Court of the state of California has rendered several important decisions relating to municipal law and the liabilities of city officials under certain conditions. Herein will be found a review of the cases.

### The San Francisco Charter Decision.

The judgment in the case of Fragley vs. Phelan was rendered on Oct. 23. The reasons given in sustaining the lower court are given in two opinions, one prepared by Justice Gaurrotte and concurred in by Justices Van Dyke and McFarlane, the other written by Justice Harrison and concurred in by Justices Beattie and Henshaw. The decision is chiefly valuable on account of the light thrown on the meaning of the words "except in municipal affairs" as used in Section 6 of Article XI of the state constitution. The part directly involved reads: "Cities and towns hereafter or heretofore organized and all charters thereof framed and adopted by authority of this Constitution, *except in municipal affairs*, shall be subject to and controlled by general laws." The Court says:

"For the purpose of getting at the true significance of these words there is no brighter light to be shed upon them than is disclosed by a consideration of the reasons which moved the legislature to propose the amendment and the people to adopt it. What was the evil to be remedied? What was the good to be gained by this amendment? The answer is common, every-day history. It was to prevent existing provisions of charters from being frittered away by general laws, which would repeal those provisions by implication. It was to enable municipalities to conduct their own business and control their own affairs to the fullest possible extent in their own way. It was enacted upon the principle that the municipality itself knew better what it wanted and needed than did the State at large, and to give that municipality the exclusive privilege and right to enact direct legislation which would carry out and satisfy its wants and needs. These are a few of the reasons which gave occasion for this concise, but all-significant, amendment to section 6, of article XI, of the Constitution of the State. This amendment, then, was intend-

ed to give municipalities the sole right to regulate, control and govern their internal conduct independent of general laws; and this internal regulation and control by municipalities form those 'municipal affairs' spoken of in the Constitution."

But the work of framing and the subsequent adoption of a freeholders' charter was not a municipal affair, because it was the creation of a municipality and hence the statute of 1897 prescribing the method by which such charters could be adopted was not unconstitutional and a charter election conducted in accordance with its provisions was regular; neither was the act special legislation. This was the determining point in the case.

In the concurring opinion of Justice Harrison the use of the words "except in municipal affairs," is further defined as follows:

"A city cannot claim to be exempt from general laws relating to municipal affairs if there is no provision relating to such affairs in the charter under which it is acting, whether such charter is one framed by itself or was given to it by the legislature. If in framing its charter its board of freeholders should make no provision for a public library, or for the improvements of its streets, the general laws upon those subjects would be operative within that city. It is not within the constitutional power of the legislature, by approving a freeholders' charter which fails to make provision upon subjects pertaining to municipal affairs, to exempt that city from being subject to legislative control in reference to those subjects, nor can the city secure exemption from such control by omitting to make such provision in its charter. If by adopting a charter which failed to give to it power to act upon affairs which are properly municipal, a city should be freed from any legislative control in reference to those affairs, either by itself or by the legislature, that city would become a veritable Alsatia.

Under these considerations it must be held that the exception in the above clause in section 6 of article XI, placed there by the amendment of 1896, applies only to such municipal affairs as are within the power of the particular municipality to perform, and that every city in the State is subject to and controlled by general laws relating to municipal affairs, unless by virtue of some provision of the charter under which it exists and is acting such municipal affairs may be engaged in and performed by it. The clause is to receive a distributive construction, and is to be read as

if its language were: 'Any city or town heretofore or hereafter organized, and every charter thereof framed or adopted by authority of this Constitution, except in *its* municipal affairs, shall be subject to and controlled by general laws.'"

### **Santa Rosa Water Works Case.**

The decision of the Supreme Court in the case of *Mock vs. the City of Santa Rosa* was filed October 19, and affirms the judgment of the lower court with certain modifications. The action was against the city, the Mayor and Common Council, Clerk, Treasurer, purchaser of the water works' bonds and the contractors who constructed the works, and the purpose was to declare void the sale of the bonds and the contract made for the construction and to obtain a judgment in favor of the city for the amount of the bonds alleged to be unlawfully sold, amounting to \$165,701.25 against the City officers and the contractors. In the lower court a decree was made, (1) declaring void the contract for the construction of the works, (2) declaring the sale of the entire issue of bonds (except series numbered 1 to 5) to have been void (3) declaring that the water works system as constructed to be held by the Mayor and Council in trust for the City as the results of the proceeds of the bonds (4) that an accounting is to be had of the actual value of the said works which being ascertained, the difference in the value and the amount of bonds—\$165,701.25—to be entered as a judgment against the City officials—except the Clerk—as individuals and as officials and the contractors jointly and severally (5) that the City have an opportunity to take the water works at the appraised value, provided that the defendants consent thereto, and if the consent be not given then the works are to be sold by the Sheriff and the proceeds applied to satisfying the judgments against the defendants, (5) that the deficiency be entered as a judgment against the defendants.

The decision is now affirmed, excepting that the portion requiring the water works to be sold in the event of the defendants refusal to consent to the city's assuming the works at the appraised value.

In thus modifying the judgment the court quoted from the brief filed by the city, viz.:

"If the court adjudged those officers liable to the city for the proceeds of the bonds and gave the city execution therefor, the municipality could have no objection. But when the property of the city is directed to be sold to

pay the debts of these alleged wrong-doers, the city has a right to object and does object most strenuously to any such proceeding."

Furthermore, the court said that it would be unjust to sell the rights of way and the incidental property which was not a part of the construction; neither would it be right to deprive the city of the very thing that the citizens had voted for.

### **Irregularities at a Bond Election.**

In the case of the City of San Luis Obispo vs. Fitzgerald, the syllabus gives the points involved:

"The act of March 19, 1899, delegates to cities the power to fix by their ordinances the time of holding an election for a bond issue, and the duty of prescribing the time and mode of voting for and against the proposition submitted, and such ordinances, passed in pursuance of the statute, have the force and effect of a law of the State, and are to be construed as if their terms had been incorporated in the statute itself.

"Where sample ballots were sent the voters on a bond election, the form of which conformed to the city ordinance, requiring the voter to indicate on the right hand margin opposite the proposition he was voting for by 'Yes' or 'No' how he desired to vote, but the ticket furnished the voters to be used had the word 'Yes' alone printed on the margin, this was a substantial departure from the provisions of the ordinance in a material matter, and rendered the election void."

### **City Officials Liable for Negligence.**

In *Doeg vs. Cook, et al.*, decision rendered Sept. 28, the question of the individual liability of officials for negligence is determined. The defendants were the Town Marshal and Town Trustees. The complaint charged that a culvert was permitted to remain open and in a dangerous condition and on a dark night the plaintiff fell into the culvert and sustained injuries for which he brings suit. The syllabus furnished with the decision is as follows:

An action for damages for personal injuries by falling into a culvert in a city, caused by the negligence of defendants in allowing the culverts to remain open, will lie against the town marshal, who is *ex officio* street commissioner, his bondsmen and the board of town trustees, where it is the duty of the trustees to see that the highways are kept in repair and it is a duty of the street commissioner imposed by law and by ordinance of keeping this particular street in good repair.



## What the Cities are Doing.

National City talks of disincorporating.

The town of Oxnard talks of incorporating; also Niles.

Vacaville is having plans prepared for a sewer system.

Los Gatos has just installed an up-to-date fire alarm system.

Redlands is about to put down asphalt pavements on Orange street.

Improvement clubs have been organized at Paso Robles and Kern.

Pleasanton will vote on the question of issuing water bonds on Dec. 19.

C. D. Vincent is to have charge of the construction of Red Bluff's sewer system.

San Luis Obispo is once more lighted by electricity, for the first time in two years.

Livermore has made a contract for fifteen 2000 C. P. arc lights at the rate of \$6.85 per month.

The town of Sonoma has secured an option on some wells with a view to making them the source of municipal supply.

Pomona reports progress in the matter of constructing a sewer system. A farm of 40 acres will receive the sewage.

The bond issue of San Luis Obispo amounting to \$119,000 has been sold to Chicago parties. The premium bid was \$2,000.

Bitumen is being used for bridge coverings in Sonoma county. The claim is that bitumen will outlast a dozen wooden coverings.

Work is being pushed on the plan for the new sewer at Long Beach and it will be ready for submission in a comparatively short time.

Azusa has closed its purchase of the Slauson water works for \$20,000 and now owns its water supply. It was regarded worth \$30,000.

San Bernardino is once more to enjoy lighted streets. The difference between the city trustees and electric company has been adjusted.

Pasadena is taking steps to secure a municipal water supply. Some of the stockholders of the East Side Water Co. express a willingness to sell their works to the city.

Tests that are being made at the flowing wells near Berkeley indicate that a supply sufficient for the proposed municipal system can probably be obtained.

Sacramento has been investigating the possibilities of securing a supply of clear water from subterranean sources east of the city. The opinions of reports are to the effect that an adequate supply exists that can be made available.

The Trustees of Healdsburg have been enjoined from doing further work in the construction of the new electric light plant, the plaintiff being the Healdsburg Electric Light and Power Co. As the company has no works in operation at Healdsburg, the suit is alleged to be a piece of spite work.

The Finance Committee of the City Council of Los Angeles has agreed to draft an ordinance taxing vehicles of all sorts. This ordinance will fix the yearly vehicle tax as follows: Bicycles, 50 cents each; single buggies, delivery and express wagons, \$1 each; two-horse rigs, \$1.50 each. It is estimated this will give a total income of \$13,000. It will be sufficient to keep handsweepers steadily employed, and will leave a surplus for aiding in the repair of streets.

The Board of Free Library Trustees of Oakland has come to the conclusion that Lafayette square is the proper site for the proposed Carnegie Library building provided that suitable arrangements to that end can be made. This decision has been arrived at after several conferences of the members of the Board. It is considered that, both from the standpoint of appearance and culture, it would be advantageous for the city to have the new library, High School and observatory grouped together.

\*\*\*

### Personal.

T. R. Palmer has been appointed city attorney of National City.

Dr. Maclay has been appointed city treasurer of Petaluma to fill a vacancy.

A. Malpas has been appointed Trustee of Los Gatos, vice B. M. Gregory, deceased.

John Scott has been appointed Trustee of Oceanside to fill the vacancy caused by the resignation of Trustee Bond.

E. E. Chase has been appointed a member of San Jose's council, vice H. Ward Wright, resigned.

J. E. Witson has been appointed Trustee of Selma in place of I. W. Helig, resigned.

## List of Cities and City Officials.

*Continued from last month.*

**Belvedere**—Population 600. Trustees:—J. W. Pew (President), L. L. Dunbar, V. J. A. Rey, A. S. Spence, E. J. Benjamin. Clerk, H. F. Buhmeister; Marshal, N. A. McLean; Treasurer, C. O. Perry; Attorney, T. E. Haven; Health Officer, Dr. Fred Bazan; Recorder, Percy H. O'Brien.

**Calistoga**—Population 750. Trustees:—A. Hubbs (President), H. E. Brown, Wm. Spiers, F. L. Grauss, A. J. Higgins. Clerk, M. Murphy; Marshal, C. H. Nash; Attorney, T. B. Hutchinson; Chief of Fire Department, W. F. Fisher; Health Officer, F. W. Mitchell; Recorder, S. A. Richardson; Street Supt., C. N. Nash; Treasurer, N. Conner.

**Cloverdale**—Population 1000. Trustees:—W. J. Flinn (President) C. E. Humbort, Fred W. Brush, A. S. Marshall, A. C. Koester. Clerk, T. B. Wilson; Marshal, W. J. Orr; Treasurer, Wm. T. Brush; Chief of Fire Department, J. H. Fletcher; Health Officer, R. S. Markell, M. D., Recorder, I. S. Lewis; Street Supt., W. J. Orr.

**Colton**—Population 2000. Trustees:—R. H. Franklin (Chairman), M. A. Murphy, Dr. A. Thompson, A. S. Fox, E. A. Pettijohn. Clerk, G. E. Slaughter; Marshal, T. S. Adkins; Treasurer, P. E. Waters; Attorney, T. D. Hamilton; Chief of Fire Department, George Bond; Health Officer, J. A. Champion; Recorder, J. E. Matot; Street Supt., Joe Andrews.

**Corona**—Population 1800. Trustees:—J. T. Burton (President) H. C. Foster, W. C. Barth, A. P. Kelley, Frank Scoville. Clerk, John L. Merriam; Marshal, J. F. Meggison; Treasurer, H. A. Wood; Attorney, G. R. Freeman; Engineer, W. L. Brown; Chief of Fire Department, B. E. Savery; Health Officer, J. C. Gleason; Recorder, A. M. Pilleps; St. Supt., J. F. Meggison.

**Coronado**—Population 800. Trustees:—John Fitzgerald (President) C. W. Robinson, S. A. Burnap, C. B. Daggett, Herbert Dabney. Clerk, J. L. Hizar; Marshal and Tax Collector, J. H. Hartup; Attorney, J. C. Hizar; Treasurer, W. H. Bentley; Engineer, W. H. Tinker; Chief of Fire Department, J. W. Waller; Health Officer, Dr. Thomas Butler; Recorder, James G. Darrington; Street Supt., J. H. Hartup.

**Oceanside**—Population 400. Trustees:—W. V. Nicholes, J. A. Band, Charles Howard, M. Peiper, L. L. Scott. Clerk, H. D. Brodie; Marshal, J. E. Myers; Treasurer, E. S. Payne; Health Officer, W. V. Nicholes; Street Supt., J. E. Myers.

**Rio Vista**—Population 868. Trustees:—M. Christensen, H. H. Johnston, James E. Sullivan, Otto Wilson, R. C. Coster. Clerk, George C. Dobbins; Marshal, Henry Boock; Treasurer, L. P. Larsen; Attorney, George Lamont; Chief of Fire Department, John Simpson; Recorder, F. J. Kalher; Street Supt., M. Frates.

**Redding**—Population 4000. Mayor, M. F. Herron; Trustees:—W. J. Gillespie, Wm. Fitzpatrick, Carl R. Briggs, Sam Hill. Clerk, T. B. Smith; Marshal, George M. Fisher; Treasurer, C. C. Bush; Attorney, Eugene S. Watson; Engineer, Sam Brackins; Chief of Fire Department, Wm. M. Campbell; Recorder, J. W. Garden.

**Rocklin**—Population 1000. Trustees:—George Good, J. C. Fard, E. C. Fellows, J. L. Levisan, J. A. Lee. Clerk and Health Officer, J. M. Walden; Marshal, W. J. Clydesdale; Chief of Fire Department, N. C. Miller; Recorder, George Good.

**San Luis Obispo**—Population 3000. Trustees:—Wm. Shipsey (Chairman and Ex-Officer), Mayor, Smith Sham, Joseph Lind, A. G. Pinho, Wm. Mallagh. Clerk, J. A. Goodrich; Marshal, J. W. Cook; Treasurer, A. T. Fitzgerald; Attorney, S. M. Swinnerton; Engineer, George Story; Chief of Fire Department, H. D. Payne; Recorder, R. A. Loomis; Street Supt., John Kelly.

**Sausalito**—Population 2000. Trustees:—J. H. Dickinson (President), L. G. Ambjornson, H. J. Crumpton, A. Sylva, J. Thomas. Clerk, J. H. Pryor; Marshal and Poundkeeper, J. A. Hanon; Prosecuting Attorney and Supt. of Street, A. Sylva; Engineer, George M. Dodge; Treasurer, F. D. Linsley; Recorder, G. W. Simpton; Health Officer, Dr. A. H. Mays; Night Watchman, Paul Tronett.

**San Rafael**—Population 4000. Trustees:—Wm. J. Miller (President) Henry Schlosser, H. C. Gieske, Henry Eickhoff, S. P. Moorhead. Clerk, John T. Bustin; Assessor, W. F. Dougherty; Marshal, John E. Healy; Attorney, Thomas P. Boyd; Treasurer, A. E. Scott; Recorder, E. Gardner; Engineer and Street Supt., G. L. Richardson; Poundkeeper, D. Begley.

**St. Helena**—Population 2000. Trustees:—W. A. Bingham (President) E. G. Schuneman, G. C. Fountain, P. S. Grant. Clerk, Otto Behrns; Marshal, J. G. Johnson; Treasurer, W. A. Elgin; Attorney, J. T. York; Engineer, C. H. Wallace; Chief of Fire Department, A. N. Bell; Health Officer, C. A. Jackson; Recorder, H. J. Chinn; Street Supt., C. A. Jackson.

**Vacaville**—Population 1500. Trustees:—Frank H. Buck (President) D. K. Corn, H. D. Chandler, Banks Crosthwaite, S. S. Hewitt. Clerk, A. M. Stevenson; Marshal, C. D. Bradley; Treasurer, Ed Fisher; Attorney, Raleigh Barcar; Engineer, F. A. Steiger; Chief of Fire Department, Ed Donaldson; Health Officer, Dr. F. L. Carpenter; Recorder, R. Long; St. Supt., Bugbee.

**Watsonville**—Population 4000. Trustees:—E. F. Wyckoff (President) O. S. Tuttle, C. Smith, P. J. Freiernuth, W. A. Trafton. Clerk, R. S. Tuttle; Marshal, C. W. Bridgewater; Treasurer, W. B. Cooper; Attorney, D. F. Maher; Engineer, C. B. Lewis; Chief of Fire Department, O. Buob; Health Officer, Dr. W. D. Rodgers; Recorder, A. B. Hawkins; Street Supt., C. B. Lewis.



# California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.  
B. F. LAMBORN, - - - - - Business Manager.

Office of Publication, Room 14, Eighth Floor, Mills Building, San Francisco, Cal.

Subscription Price, - - - - - One Dollar a Year.

## A Municipal Program.

Municipal government would be more progressive if those in charge of the affairs of a city would formulate a program once each year and arrange to carry it out as nearly as possible during the year.

In our private lives we all have certain aims; we strive to attain definite objects; we have ideals which we hope some time to realize. In our municipal life an objective point to be reached is as essential to progress as it is in our private lives. A haphazard way of conducting one's private affairs usually results in failure; providing for the day with no thought for the morrow finds us next month in the same condition as we were last month. No progress can be made while this policy prevails.

Yet this is the very policy that is in vogue in most of our municipalities. The management of many—possibly most—of our cities is of the temporary, expedient kind. Many of our boards of trustees or councils meet monthly or weekly, make provision for such things as are urgent and adjourn until the next meeting when the same formal routine is gone through with.

The citizens of the cities complain that nothing is being done and do not understand why it is so.

Things would be different if every board of trustees or council would formulate a municipal program and endeavor to carry it out. The program should be a reasonable one; not so elaborate that the carrying it out would be

a burden, but it should be the result of careful study of the prevailing conditions and framed accordingly. The program ought, if possible, to involve some new and to be permanent improvement.

This may be the improvement of certain streets or the opening of new ones, the acquiring of a park or improvement of one, a public library, new municipal buildings, the placing of street signs; or it may include something more elaborate which requires a bond issue, like water works, sewers or light works.

In case the Board or Council cannot decide upon the things to be undertaken, or in case of a disagreement among the members, the advice of citizens should be sought for. Invite your Board of Trade, or Improvement Club, to suggest a program, or in case a town has none of these organizations, then let a mass meeting of citizens be called and a program discussed and settled upon. In any event, have a program and then endeavor to carry it out.



Every city official in the state is privileged to attend the next League Convention and have a voice in its proceedings. In addition, city councils or boards of trustees may elect delegates outside of their own bodies. Every city should aim to have some sort of a representation at this meeting.



In the list of incorporated cities and towns owning their own water systems, published in the October number of this magazine, there were three omissions, viz., Colton, Corona and Ocean-side. This makes the total number of twenty-nine municipal water systems in this state with one more in course of construction and four others wherein bonds have been issued for the purpose. Thus nearly one-third of the municipalities of California own their own sys-

tems. This fact is a surprise to most of us. The question now is, Is this municipal ownership a success in this state? The other cities want to know whether it is or not, and that is what the League of California Municipalities proposes to ascertain. Circulars seeking information on this point will soon be sent out, and it is to be hoped that prompt responses will be made to the request for this information.



In this issue we publish a statement that the lining of the out fall sewer of the city of Los Angeles shows signs of rapid disintegration; and the suggestion is made that this result is the effect of sewer air, or lack of ventilation. Now this may be true, and if true, will someone kindly tell us what particular chemical substance is contained in sewer air that will produce this effect; or is this disintegration the work of bacteria. According to an article in the *Scientific American* (republished in this issue) certain bacteria will destroy masonry—the same bacteria that act as a purifier of impure water. If it is the work of bacteria, more ventilation of the sewer will not be apt to be a means of preventing further deterioration. In order to find a complete remedy for the trouble we must first ascertain the cause. If it is due to a chemical substance in the sewer air, we must know what that substance is in order to apply a resistant coating to the sewer. If some other agency is in operation another remedy would have to be sought for.



The decision of the Supreme Court in the San Francisco Charter case will be valuable to cities that contemplate framing new charters. The principle laid down that a city is subject to general laws where the charter contains no provisions on the subject legislated up-

on, is sound law. Therefore, it behooves cities that want to secure absolute home rule to see to it that the powers provided for in the charter are ample and broad enough to cover every possible contingency that may arise. Silence in any respect gives an opening for legislative acts to control. Freedom from legislative interference can only be secured by the assumption to the largest extent of functions by the municipality. A power once assumed becomes a "municipal affair," over which the legislature has no controlling power.



The most important work to be done by the coming convention will be the adoption of a program for the future work of the League of California Municipalities. There are a great many things that may be done; the question to be determined is, what shall be done next year?



Reforms, like other forces, always proceed along the lines of the least resistance. The greatest force opposed to reform is that of special interests. These interests are greatest in the larger cities. Hence, reform in municipal government is sure to proceed more rapidly in smaller towns. In fact, government in these towns is seldom bad. Having a good administration to start with progress is more rapid in the smaller municipalities.



This magazine would like to secure the interest of the improvement clubs that exist in nearly every town in the state. They are engaged in the work of municipal improvement and their importance is second only to the officials of the cities. They are a very valuable factor in the development of the new municipal life and it would be a good thing for them to receive copies of this magazine. It is a matter that will be looked after in the near future.



## Municipal Ownership in Michigan.

The Michigan Municipal League adopted resolutions favoring the municipal ownership of public utilities, including street railroads, and asking for the submission of a constitutional amendment by the next session of the legislature permitting it. Municipal ownership was favored by all of the speakers, and many of the towns reported that it was already in vogue, as far as water and electric lighting is concerned, to the decided advantage of the municipalities.

The village of Upper Alton, Ill., was recently given water mains from Alton. The city of Alton then loaned the village an old hose truck. No appropriation could be made for horses, so the village offers a prize of \$5 to the first person who shall hitch a team to the cart in case of fire.

**C. E. Moore, C. E.**

(Mem. Am. Soc. C. E.)

Consulting Engineer for Water Works, Pumping Plants, Electric Lighting Plants, Sewerage Systems, Steel Construction.

Home Address, Santa Clara, Cal.

C. B. WILLIAMS.

L. C. WILLIAMS.

J. H. BELSER.

**Williams, Belser & Co.,**  
**General**  
**Contractors.**



Builders of . . .

**WATER WORKS,**  
**SUBWAYS,**  
**PAVEMENTS,**  
**SEWERS, ETC.**



Office: 302 Montgomery Street,  
Room 2,  
**SAN FRANCISCO, CAL.**

**P & B**

**Building Papers**  
**Ready Roofings**

ALL DEALERS

MANUFACTURED ONLY BY

**Paraffine Paint Co..**

**San Francisco**

### REFERENCES

Market Street Railway Co.  
Oakland Street Railway Co.  
California Cotton Mills.  
Western Meat Co.  
Palace Hotel. U. S. Mint.  
San Quentin Prison.  
Claus Spreckles' Bldg & Steamers.  
Board State Harbor Com. Steamers.  
Alameda Municipal Electric Plant.

**413 Claus Spreckles Bldg,**  
**SAN FRANCISCO.**

FACTORY AT LOS ANGELES, CAL.

**R. J. KERR & Co.,**

SOLE MANUFACTURERS

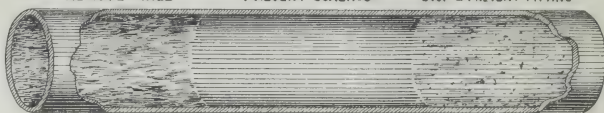
**KERR'S BOILER COMPOUND,**

**GUARANTEED TO**

REMOVE SCALE

PREVENT SCALING

STOP & PREVENT PITTING



TRADE MARK REGISTERED

# CALIFORNIA MUNICIPALITIES

VOL. I.

San Francisco, December, 1899.

No. 5.



UNION PARK, SAN FRANCISCO.

## ..... CONTENTS. ....

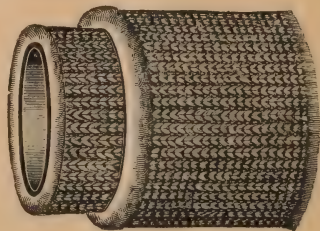
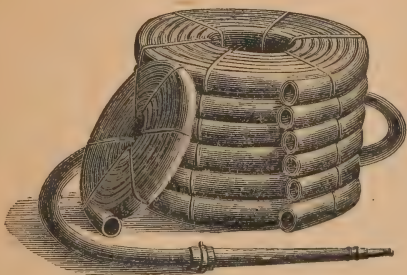
What a City Has Done and is Doing—Private Profit vs. Public Service—City Ownership in Boston—Sewage Disposal Problems—Wood Pavements in the East—League Program—Discussion of the Government of Cities—Watsonville's Sewer System—Miscellany—Recent Court Decisions—What the Cities are Doing—Editorial.



# Leather and Rubber Belts.

Hose, Packing and Rubber Goods

Of Every Description.



Gorham Rubber Co.,

308 Mission St.,

SAN FRANCISCO.



*Bauer Lamp & Reflector Co.*

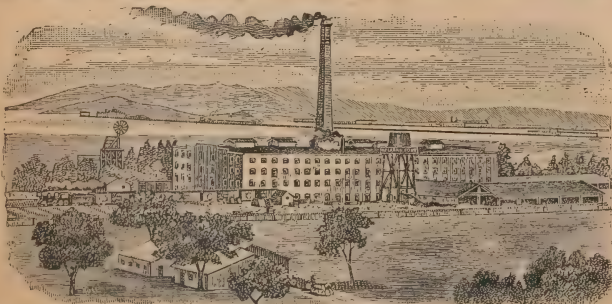
421-423 MISSION ST.

SAN FRANCISCO, CAL.

Manufacturers of all kinds of Lamp, Lanterns and Reflectors, Locomotive, Mining, Cable, and Electric Car Headlights, Mill, Marine and U. S. Navy Lamps. Street, Coach, Carriage and any other style of Lamps. Special Lamps and Headlights of Bauer Patent for Fire Apparatus.

**GLADDING McBEAN & CO.**  
MANUFACTURERS  
ARCHITECTURAL TERRA COTTA  
HOLLOW TILE FIRE PROOFING  
SEWER AND CHIMNEY PIPE  
PRESSED BRICK DRAIN TILE, ETC.  
1358 & 1360 MARKET STREET, S. F.  
MANUFACTORY AT LINCOLN, CAL.

**PATRICK & CO.**  
RUBBER STAMPS  
STENCILS, SEALS, BRANDS, ETC.  
318 CALIFORNIA ST., SAN FRANCISCO.



WORKS AT ALAMEDA

**N. Clark & Sons**

17-19 Spear St.

SAN FRANCISCO, CAL.

Manufacturers

CULVERT PIPE

WELL TUBING

FLOWER POTS

VASES, FILTERS

DRAIN TILE, ETC.

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. I.

San Francisco, Cal., December, 1899.

No. 5.



*W. H. Lamb, Mayor of Santa Cruz.*

## **What a City Has Done and is Doing.**

**S**ANTA CRUZ is the only city in the state that carries on and maintains all of the following: Its own water works; its own street lighting plant; maintains a public park; maintains a free public library; has a complete sewer system; has an efficient fire department. Besides, it has constructed about a mile and a half of bitumen streets, nearly three miles of

macadam streets, built a cliff or seaside boulevard six miles long, and owns a salt water pumping plant for street sprinkling purposes. Furthermore it owns and controls an extensive water front.

It may therefore interest the municipal officers of other cities if a somewhat detailed account of these public services were given through the pages of this



magazine. However, it will be impossible, in the limited space at command to furnish any minute and technical data.

Santa Cruz's water system was constructed seven years ago, and consists of a gravity system. The source is from Laguna creek about seven miles from the city. This creek is fed chiefly from springs and affords an ample supply of remarkably pure water. The reservoir is located about a mile from the city at an elevation of 350 feet which gives an ample pressure in all portions of the city. It has a capacity of 60,000,000 gallons. The pressure is sufficient to provide good fire protection and it is not necessary for the city to maintain steam fire engines. Six very effective streams of water have been supplied from the system. The system has paid a handsome revenue to the city despite the fact that a private company has been an active competitor ever since the municipal system started. The city has supplied only about two-thirds of the possible consumers. The rates charged (until recently) were about one-half of that previously charged by the private corporation, the basis being fifty cents a month for a family for domestic purposes. The fact that this revenue has been largely in excess of the operating expenses and that this excess has been used to defray the ordinary expenses of the city government has led the city council to adopt the "free system." It was considered that an injustice was being done to the city's water consumers by compelling them to pay more than their share in maintaining the city and the taxpayers who patronized the private water company were the beneficiaries. This was considered unjust to those who stood by the city. Therefore, since September first water has been furnished free for all domestic purposes. A charge is still made for water furnished to business houses, for irrigation, (lawns and gardens excepted) and when it is used for power. Even now the revenue is suf-

ficient to pay the cost of operating and maintaining the system, with a small surplus besides.

Unfortunately, the city has been in litigation with the owners of the private system, practically ever since the system was first started. The present outlook is, however, that the city will soon acquire the rival works and the litigation will be stopped. The city has been desirous of securing this property for many years. With the combined system and by supplying all the inhabitants with water at very moderate rates, the revenue will be such that the entire indebtedness of the city will be rapidly paid and to the relief of the taxpayers.

The street lighting system was installed about ten years ago, and consists of the necessary engines and dynamos, wires, poles, etc. It supplies seventy-eight 2000 C. P. street lights operated on two circuits. That which lights the main business streets is run on an "all night, every night" schedule. That supplying the lights of residence districts runs on a "moonlight, cloudless 12 o'clock" schedule. The lights are in every way satisfactory. They are operated, however, in conjunction with a sewage pumping plant referred to hereafter. It is therefore difficult to give the cost of lights per month. This pumping plant has to be run anyhow, and the extra steam and extra labor that is required for the light works is comparatively small. Under the circumstances, any given figures would be misleading. The approximate cost of operating, (including repairs) is about \$4.00 per lamp per month. The sewage of the city is disposed of by pumping it from a collecting reservoir over a high bluff west of the city and is thence discharged into the ocean at a point where the tide and currents carry it seaward. This is done in order that the famed beach with its bathing facilities may not be contaminated by the sewage. While this pumping is somewhat expensive, the advantage in main-

taining the health of the city and the attractions of its water front afford ample compensation therefor. The system is quite extensive and complete in every detail.

Of the street system the citizens are justly proud. Santa Cruz county being the location of vast deposits of bituminous rock, it is natural to expect that all of the business streets should be paved with this material. A mile and a half of bituminous paved street testifies that the existence of this natural paving material is appreciated. These paved streets are swept by hand at night and every morning they are as clean as the sidewalks. By sweeping at night none of the dust arising gets into the stores. The hand-sweeping takes up the finer particles of dust that a machine would leave. Therefore the streets do not need sprinkling. It has been found that the sprinkling of bitumen-paved streets injures the surface, by extracting the oil and rendering the pavement liable to a more rapid disintegration.

Within the city limits exists a rock quarry which furnishes a very good macadamizing material. The result is that there are about three miles of substantially macadamized streets. These streets have a foundation of from 18 to 24 inches of broken rock thoroughly rolled, covered with a thin layer of so-called "rotten" rock. The surface of these streets is uniformly smooth and heavy rains have produced but little erosion. Along the ocean front extending north-west is the new "cliff boulevard." For a distance of four miles this drive follows the contour of the shore, affording a magnificent vista of

"Ocean old, centuries old,  
Strong as youth and uncontrolled  
Pacing restless to and fro  
Up and down the sands of gold."

A drive over this affords a pleasant diversion to the many thousand visitors that pay their annual pilgrimage to the state's famous watering place. This road is thoroughly sprinkled during the summer months with salt water from the ocean. The material of the road is sand but the effect of the salt water is

so cohesive as to make the surface almost as hard as cement. And herein of the salt water pumping plant. It is worthy of a more detailed description than can be given here. The motive power is furnished by the ocean itself; in other words a wave motor lifts the water from the sea into a tank which constitutes the reservoir, from whence it is distributed by pipes to various points along the ocean boulevard and into the city itself. A shaft was sunk in the cliff near the ocean line to a depth of perhaps fifteen feet below low water mark; from a point a little below the level of low water a tunnel was run oceanwards until the water could enter freely. A heavy float was constructed and placed in the shaft, equipped with the necessary guides so that every wave that would enter the tunnel and shaft would, by its force lift the float. Hence, a constant up and down motion was secured. A pump was connected to this motor and the result is that a stream of water sufficient to fill a six inch pipe is constantly being pumped into the reservoir. The power of this motor is sufficient to furnish three times the quantity used at present. The expense is very trifling and thus it is that nearly all of the streets of Santa Cruz are sprinkled with salt water. The results produced are good. The surface of the street is hardened, dust is seldom formed, it destroys weeds and in addition operates as a disinfectant. There has never been any complaint about its rusting wagon wheels and taking the enamel off of bicycles.

Santa Cruz' public park consists of a tract of land of 565 acres, a gift to the city from the late J. De Laveago. It is in the north-east part of the city and consists of a plateau elevated about 200 feet above the business part of the city. A portion of this park has been donated to the state as a permanent summer camp for the National Guard. The remainder is being improved as rapidly as the finances of the city will permit.



The free library is the pride of the city. It is well equipped and well managed. The generosity of Andrew Carnegie or some other philanthropist to present the city with a suitable building is being awaited. If the gift is not forthcoming the city will make the improvement on its own hook.

The fire department is well equipped and consists of one combined chemical engine and hose cart and one single-horse hose cart, all housed in a very handsome building. The firemen are all fully paid. Besides, there is a volunteer hook and ladder company and an additional volunteer hose company. There is an effective electric fire alarm system.

The water front of Santa Cruz has not been utilized by the city to any great extent. The ownership and control is vested in the city. The wharves now existing were erected by private parties under franchises which have expired. While the city claims the ownership, the claim is disputed. As soon as circumstances will permit the city will give more attention to the development of the possibilities of its water front. The improvements will include the erection of wharves, bath houses, pleasure pavilions, etc.

Before concluding, a misapprehension concerning the alleged excessive tax rate of the city should be corrected. The tax levied for general purposes is but \$.50 on the \$100, with an additional tax for library purposes, of seven cents. While our bonded indebtedness is great, apparently, nearly \$300,000, yet there is on hand in the City Treasury, enough to pay one half of that debt and all interest due to date. But the courts have enjoined its payment. Consequently the city has to levy a tax, not only to pay the bonds not due but also the interest on those bonds that are past due, and interest on the interest that is due. In other words the city has to levy a tax to pay interest on money that it has on hand. This condition will, it is hoped, be shortly

changed, so that the city can pay its debts. The credit of the city is and always has been good. The present administration is endeavoring to straighten out the legal tangles and when this is done the tax rate of the city will be no greater than that of any other well managed city in the state.

Thus Santa Cruz is on the progressive road and the citizens generally feel satisfied that their local affairs are judiciously and prudently managed. Partisan politics has never been considered in connection with the city government.

In conclusion, the city officials would be pleased at any time to show visitors all that concerns their municipal affairs and would be more than pleased to have the next annual meeting of the League of California Municipalities here Santa Cruz by the sea.



### Private Profit vs. Public Service.

It is a standard argument that private management is more economical than public, and it is constantly urged against the extension of municipal undertakings.

Thus, water, light, paving, cleaning, building, etc., are said to be cheaper to the city resident when they are sold or managed by private ownership.

Is this claim good in theory or practice?

The argument herein presented on this question is that when a service is given or an article is sold at cost, the price must be lower than where profit is made—the presumption being that employees are equally honest and efficient, whether engaged at private or public work.

An analysis shows that there are always two different objects sought in private and public affairs.

As to the first, it is manifest that profit is the end to be attained.

This is true whether the business concerns one person, a firm, a corporation or a trust.

Each of these has the same purpose—profit—and when that cannot be gained, then such business must stop.

Therefore, considering the employer's interest only, the philosophy of all private business may be crystallized into a single sentence: "Pay the smallest wage, sell the smallest product, and get the highest price."

It is clear that for a given amount of work the employer always will pay the lowest wage, for the difference between a low and high wage is that much saved—profit. For instance, the sense of a man would be impeached if he gave four dollars for what he could get as well done at three. The tendency is always to reduce wages.

Again, the desire to gain profit ever tends to lead the employer to sell an article, either, short in weight, adulterated in quality, or poorly made. This is true, because if notwithstanding these defects he can sell at a price commensurate for a good article,—the cost being less, the difference is profit.

Lastly, if an employer can secure a monopoly in his line, then he can fix the price of his products. This principle is the one through which the present Trust is created. Its gradations are these successive steps: Individual, Partnership, Association, Corporation, Trust.

The last is the natural, logical and legal growth of private ownership of the human essentials—Land, Air, Water and Sunlight, or their equivalents. No business is run for sentiment or philanthropy, but is inspired solely by profit. And this, under our present social economics, is legitimate.

Having reached the Trust, the next step in this civic and industrial evolution is Municipal Ownership. This justifies us in examining such ownership to find out its object, and to ascertain if its philosophy can also be briefly stated.

This is a single phrase: "Pay the highest wage, sell the largest product, charge the smallest price." The object here is not profit.

This is the keynote to the whole municipal system, and unlocks all and everything therein. For experience in all public ownership—village, county, city, state, national—proves the worker is always given a good wage, fixed in amount, prompt in payment, and commensurate with the service. Therefore, in demonstration of these better conditions, most workers prefer public employment.

In the next place, municipal operation, run for accommodation of the citizenship involved, does not sell an article, either, short in weight, adulterated in quality, or cheaper than it appears. Being inspired to serve the public to its satisfaction, its constant effort is to give the largest product in its power. Finally, as profit is not the thing sought, the service given, or product or thing supplied by the municipality, is always at cost, or approximately thereto.

Following along these three lines, organized society always works for permanence of plant and efficiency of apparatus. It seeks trained and competent help, giving such a wage as will make its employee satisfied, and never has a strike or lockout.

Realizing that private ownership of public utilities is the source of vast profit, and consequently of a myriad of evils, the public intellect is diligently hunting for a remedy. Where a monopoly based on some special privilege is to be remedied, this can be found only in supplanting the private trust by the public trust.

JAMES TAYLOR ROGERS.

San Francisco, Cal.



The Seagrave Company, Columbus, Ohio, has just accepted an order from Dawson City, Alaska, for delivery within thirty-six working days, for one latest improved full trussed hook and ladder outfit, complete, and also three large-sized hose carts with chain reeling attachments.



## City Ownership in Boston.

THOSE who are interested in the progress of what has been styled "municipal socialism" will find interest in a review of the work done in this direction by the city of Boston. Boston has always been considered the home of ultra conservatism, and it is somewhat startling to learn that in this respect it is rapidly approaching the radicalism of the European cities. Its development of this idea is an evidence of a tendency, permanent or not, wise or otherwise, as the future may demonstrate. Mayor Josiah Quincy, who is now at the age of 36 years, concluding his fourth year as Mayor of the city, recently furnished an interview on the subject of Boston's experiments which will be read with interest:

"In this country Municipal Socialism must at present be described rather as a tendency than as a definite creed or a distinct programme. The public ownership movement, which would bring such things as street railways and gas and electric light companies under direct municipal administration or control, is only one phase of the broader movement which is everywhere manifesting itself for the larger use of the organization and resources of the modern city for the social advancement, including the use of physical, mental and moral agencies and even of pure recreation, of the great masses who inhabit our cities.

"The administration of the city of Boston for the last four years has been in sympathy with this tendency toward the higher development and specialization of the municipal corporation. The most notable directions in which progress in this general line has been made may be found in the completion and successful operation of an underground subway for street railway cars, built directly by the municipality and now leased on terms which will repay

the money borrowed on the city's credit in about forty years, leaving this valuable property under municipal ownership, free and clear of all debt at the end of that time; the establishment of a printing plant, owned and operated directly by the city, in which all of the municipal printing is done; the creation of a department which executes, through mechanics employed directly by the city, all repairs upon public buildings coming under any of the recognized building trades, and also undertakes some construction work upon new buildings; the creation of an electrical construction department, which purchases and installs all electric plants used by the city, as well as keeping all its electrical apparatus and wires in good repair; the creation of a separate department for the administration of all public baths, gymnasiums and convenience stations; the establishment of a music department, which has charge of the development of public music, the establishment of an art department, which has full control of matters pertaining to sculpture and the fine arts, so far as the municipality has to do with them; the creation of a department of municipal statistics upon the lines successfully laid out by some of the great European capitals; the adoption of the policy of providing, under the administration of the Park Department, a considerable number of local playgrounds and athletic fields scattered through the different districts of the city; the throwing open of the schoolyards during the summer vacation as playgrounds for the smaller children under proper supervision; the successful conduct for the two seasons of a free summer camp for boys upon one of the islands in the harbor; the carrying out upon a large scale of day excursions for children during the summer season; the installation under the

Water Department of a considerable number of street fountains, furnishing water cooled by ice during the hot season, and finally the establishment of courses of free lectures for adults during the winter season under municipal auspices. Varied as are these undertakings they may, perhaps, all be fairly regarded as partaking, at least, of Municipal Socialism, in that they materially enlarge the functions and services brought under public administration—in some cases displacing the private contractor, but in most merely enlarging the scope of municipal activity and giving the people the benefit of entirely new lines of service.

"The question of rapid transit through the congested part of the city has been, as is now generally admitted, successfully solved under municipal directions; a subway for electric cars has been built, and the subway represents not only the successful solution of a difficult problem, resulting in great indirect benefit to the city, but also an investment of public money directly profitable in dollars and cents. During two years of its establishment our printing office has done work amounting at the contract rates formerly paid to the sum of \$300,000. It is run upon a strict union basis, and the financial results have been highly satisfactory, as careful reports made by disinterested outside experts showed that the office made an average profit of \$10,000 per year of operation.

"The repair department has done away with the small contractor in connection with repairs and alterations upon all public buildings; it has its well equipped shops and storehouses, in which all of the building trades—such as carpentering, plumbing, steam fitting, painting, roofing, plastering, &c.—are carried on, all materials being bought directly by the city, and mechanics being employed as needed, according to the work to be done. Work done for the other departments of the city is charged for on the basis of actual

cost of labor and materials, plus 10 per cent for general expenses and contingencies, and on this basis the department earned a net profit of over \$10,000 the first year of its establishment. The city pays the full trades union rate of wages in the different branches and works the men the regular hours established by the unions.

"Perhaps the feature of municipal development in Boston which has of late attracted the most attention, not only within its own limits but at a distance, has been the notable development of public bathing. We now have an all-the-year-round public bath, erected at a cost of \$80,000 and undoubtedly the finest public establishment of the sort in this country. This is patronized by some 2,000 persons every week. All bathing facilities are free, and the city provides bathing suits and towels at a very small charge, and these are washed in a large municipal laundry operated by the Bath Department.

"We now have under the music commission a municipal band of 35 pieces, made up of the best band musicians in the city, and constituting, as an organization, the best brass band which we have ever had.

"In the opinion of competent judges, Boston, with its free concerts, has already made no small progress toward establishing music in the popular estimation upon something like the plane which it occupies in foreign countries. Of course, the employment of the very best professional talent has been necessary for the accomplishment of the results, and the Music Commission itself is made up of musicians of standing, who serve the city without pay.

"The large park has, in our American cities, somewhat overshadowed the local playground; the latter, however, is of the greatest importance, and it is very largely used by many people, particularly children, who are only able to visit the parks occasionally. Boston has now nearly a score of these playgrounds, some of them large enough for athletic fields.



"One of the distinctive lines of work of a social character which has been carried on by Boston is found in the excursions for children and in the boys' camp.

"In the boys' camp the city has accommodated from 100 to 150 boys a week for ten weeks; only boys who would not otherwise get an outing of some sort have been eligible for membership and there has been no charge, while the expense to the city has amounted to less than \$2 a week for each boy. Membership in the camp has been connected with our schools, and used as an incentive to good conduct and excellence in study.

"It may seem to some like a radical innovation for a municipal water department to go into the ice business, but this has been done by our water department, with much appreciation on the part of the public. The department has had in operation this summer over thirty ice water fountains in different parts of the city. The ice was harvested on the water reservoirs, and the water is cooled to a temperature of about forty-five degrees without coming into contact with the ice, merely passing through a coil of pipe upon which the ice is placed is an insulated box underground. The expense has been but trifling, while a great many hundreds of thousands of draughts of cool water have refreshed the public upon hot days.

"In answer to the question of how far I believe it would be possible to extend municipal work along such lines as I have touched upon, I cannot fix upon any definite limits. I believe myself rather in a gradual growth toward better social conditions than in sudden and radical changes, and I regard the developments I have referred to rather as the natural outgrowth of what has preceded them in a community which is fairly progressive in spite of its conservatism in certain respects than as radical innovations, but the next few years will show better whether we have gone

ahead of what the people are ready continuously to sustain. All progress must come largely from the initiative of exceptional individuals, but results can only be maintained as far as the people are ready to support them. Personally, I would believe in a steady, forward movement along the lines above indicated, and if this led ultimately to a municipal community whose affairs would be largely socialized, I should not be afraid of such a result.

"As to the question of expense, the developments I have mentioned have been carried out with only a very slight addition—not large enough to be really felt by anybody—to the burden of taxation, and a great deal can be accomplished in the way of social benefit at a very slight expenditure if the work is intelligently planned and honestly administered. Personally, however, I am not at all afraid of a substantial increase in municipal taxation if only the additional money raised can be really expended for the benefit of the masses of the people, as I think it will return many fold in reducing disease and crime and increasing the real productive power of the community. I believe that public baths, gymnasiums and playgrounds, for instance, will be directly worth to the community in dollars and cents much more than they cost.

"As to the influence upon municipal politics of such developments as I have sketched, I believe it is decidedly wholesome. In the first place, it tends to introduce real issues in connection with city affairs and to make a city election something more than a mere struggle as to which set of persons shall hold the offices. The more points at which the municipal government touches the average citizen the more likely he is to interest himself in its proper administration. While I do not believe in imposing upon municipal machinery tasks which it is not sufficiently developed to perform with reasonable honesty and intelligence, I do not believe that it is necessary to wait before initiating

movements in the direction of municipal socialism until our present municipal governments are rapidly improved. I am confident that the very process of introducing such changes will at least tend toward improvement, and I believe that the elimination of the small contractor will have an immediate ben-

eficial influence in the direction of better politics. The influence of the contractor is one of the most persistent and demoralizing that is met with in municipal affairs, and the more his field can be restricted the purer municipal politics will become.



## Sewage Disposal Problems.

[Full text of an address delivered by G. Everett Hill, of New York city, before the Convention of the League of American Municipalities, Syracuse, N. Y., September 19-22. Reprinted from *City Government*.]

WHEN man forsook the nomadic for the settled life he formed the habit of depositing his wastes in some one particular spot. So long as the area surrounding his habitation was large, he suffered little recognized inconvenience. But when the farm became a village and the village a town—as the town was divided and sub-divided, and the houses and population multiplied, man was brought into closer relations with the accumulation of his own excrement, offense and disease resulted and it became evident that either he or it must get off the premises. Consequently he sought for a new place in which to throw it, and, grumbling about the cost, built a sewer to the nearest stream. He thought only of transferring the offence to some point beyond the reach of his senses—not of destroying it. But an epidemic broke out in a town below, which used this stream as a source of water supply, and the resulting suffering and death were found to be directly chargeable to the community which had “thrown away” its sewage into the stream. The courts were invoked and future pollution of the stream was forbidden. What could be done with the sewage? The ocean was too remote to be reached. There was no mighty river available which could serve as an outlet. Then man began to think and to study. He found that sewage was not irredeemable filth. He learned that nature, when allowed to have her own way,

would turn his foul and poisonous off-scourings into clean and harmless mineral forms, and would restore to contaminated water its original purity. He learned, however, that this could be done without offence, and close to his own home: that there need be no accumulation of filth, nor any pollution of streams or other infringement of a neighbor's rights: that death rates can be lowered, that suffering and expense of sickness can be lessened, and the period of productiveness lengthened. Now he is trying to preach the gospel of sanitation to his fellow men.

Self-betterment cannot be forced upon the individual or the community by any outside influence; but the courts will protect an individual threatened by his neighbor, or a town whose health—or comfort—is menaced by the act of another town. The common law on the subject is clear and comprehensive; but the growing realization of the danger and the wantonness of stream pollution has led to special and stringent legislation in many of the states, and federal action is expected. Massachusetts, Ohio, New York, Minnesota and West Virginia were the pioneers in this work. North Carolina, Connecticut and New Jersey have followed. Pennsylvania, Illinois and Wisconsin have begun the fight for purity. Massachusetts, basing its experience on the investigation of numerous typhoid epidemics, will not permit the discharge of unpurified sewage into any water-



course used as a source of domestic supply within twenty miles of the point of proposed outlet. Ohio, by a recent decision of its state board of health, forbade the discharge of crude sewage into Lake Erie within ten miles of Cleveland's water intake. New Jersey has restrained Paterson from emptying more sewage into the Passaic, although this river is not fit for use as a water supply. St. Louis is taking steps to prevent Chicago from pouring its filth into the Mississippi. The granting of injunctions restraining individuals and corporations from discharging sewage into streams is a matter of almost weekly occurrence. If any of my hearers represent communities whose water-courses are polluted by the sewage of a superfluous population, I assure them that they have a remedy. But, let me add, that the weapon is a gun which must be honored in the breech as well as at the muzzle. The marksman should have a very firm stand before he pulls the trigger.

Before discussing in detail the problems before us, let me state briefly, as a foundation, the aim, difficulties, methods and results of sewage treatment. Ordinary domestic sewage consists of 998 parts of pure water, one part of mineral matter—mainly salt—and one part organic matter. The mineral matter is unobjectionable and may be disregarded. The only element which can cause offense or give rise to dangerous conditions is the one part of dead organic material. It matters not where this comes from—from the water-closet, the kitchen sink, the stable, the slaughterhouse or the brewery—whether it be of animal or vegetable structure. In all cases its constituents, its capacity for mischief and its destiny are the same. It is composed entirely of mineral elements—mainly of carbon, nitrogen and hydrogen, but no chemistry, save that of life, can combine these elements in this form or can give to any other arrangement of them the characteristics of organic matter.

In the conservation of matter, as of energy, nothing is ever lost. When an organic structure ceases to be the abode of the mysterious vital principle, it must be demolished, and the materials of which it was built must be returned to nature's storehouse for further use. There is but one way in which organic structure can be disintegrated—by combustion. The ashes and gases which result from the combustion of animal or vegetable matter are no longer organic, but mineral. Combustion, which is the same as oxidation, is of three kinds: Igneous, which we call fire: chemical, which is illustrated by the rusting of iron: and bacterial, which is commonly known as decay. The first can attack either mineral or organic matter. It is of little or no use in the treatment of sewage; for the one part in a thousand which we wish to destroy cannot be touched until the 998 parts of accompanying water have been evaporated. The second chemical oxidation, can attack mineral matter only, save in a very limited degree. It is of no value in sewage treatment. The third, bacterial oxidation, is the means which nature has provided for the demolition of dead animal and vegetable tissue and the preparation of plant food.

Bacteria are minute living organisms, which, although invisible as individuals, are so numerous and so active as to balance the energy of all the constructive forces of the vegetable world. They are universally present—in water, in the air and in the soil. They have been at work ceaselessly since the first death of a vegetable growth. They have disintegrated and returned to the soil, since the beginning of history, a mass of human excreta which alone would equal 178,000 pounds for each square foot of the earth's surface, to say nothing of the wastes of all other forms of animal life and the enormous masses of dead vegetation. Manifestly, without their aid existence would be impossible.

There are as many kinds of bacteria

as there are kinds of men. Some few are known as the stimuli of certain specific diseases: but the vast majority are beneficent. The percentage of hostile forms is no higher than the percentage of recognized criminals in the total population, or no greater than the percentage of poisonous plants in the flora of the country.

For our purposes, these organisms may be divided, broadly, into two classes—those which do their best work in the absence of oxygen, and those which are most energetic in the presence of oxygen. There is no distinct line of division between these classes; indeed, a great many kinds of bacteria seem to thrive equally well under either condition.

The complete mineralization of organic matter is not accomplished by any one species; but the work is divided into successive stages. Each organism performs its own special work and passes on the improved but not completed product to the next.

The final changes can be accomplished only by the air-loving organisms, for the presence of oxygen in considerable quantities is essential for purification. The earlier changes, however, may be made by either aerobic or anaerobic forms. When this work is done by the former, the changes are simple and inoffensive. This is the decomposition which breaks up fallen leaves and turns into plant food the manure spread on a lawn or field. So far as we know, its agents are not only harmless in themselves, but they are hostile to and victorious over the great majority of disease germs. Where the conditions favor the growth of anaerobic organisms, the changes are more complex and objectionable. This is the putrefactive process, which rots sewage stored in a cesspool. It has the power of liquefying the solids more rapidly than the aerobic process; but many disgusting and poisonous by-products are evolved; and, although it is probable that disease germs perish in the strug-

gle for existence, conclusive evidence to this effect is still wanting. This we do know, that, save for the competition of myriads of other germs, the conditions—moisture, darkness and absence of air—are favorable for the development of the microbes of the so-called "filth diseases."

Briefly outlined, the methods of sewage purification in use are the following:

**Broad Irrigation.** This is a process of aerobic bacterial combustion, whose essential feature is the spreading of the sewage intermittently in thin sheets over the surface of a large area of ground, so that each drop of it may come into contact with the atmosphere. This is the system which has been used for many years, with excellent results, at Berlin, Paris and many other places. The manner of operating is simple and the expense of maintenance light. It requires more land than any other process, and the soil must be of a suitable nature and well underdrained.

**Intermittent Downward Filtration.** This is but an intensified form of irrigation, made possible by the use of a soil so exceedingly porous and well drained that the air can penetrate to a considerable depth, for the oxidation of the impurities carried into the pores by the intermittent floods of sewage. It requires less land than irrigation; but the quality of the soil must be especially suited to its work, and the preparation must be more careful.

**The Septic Tank.** This is an anaerobic or putrefactive process, and is, therefore, incomplete, requiring supplemental treatment of the sewage by some aerobic method. It consists of a water-tight tank or cesspool which collects the sewage and retains it long enough to allow the sedimentation of the solids. These rot as they lie in the bottom, and pass out in solution, or in a finely divided suspended state. The proper unit of size for the tanks has not been determined. In England they are built to hold twenty-four hours'



flow. The one at Champaign, Illinois, has about one-twelfth this capacity. Theoretically, septic tanks should be large enough to retain the sewage until sedimentation is complete and putrefactive disintegration has begun, but it should not be so large as to permit the attainment of an advanced stage of putrefaction or the accumulation of bacterial poisons to a degree that would be fatal to the bacteria themselves.

Dr. Sims Woodhead says: "The anaerobic changes, usually spoken of as 'putrefactive,' require to be carefully controlled, and it has been evident to me throughout that this anaerobic phase is often carried too far, with the result that the aerobic nitrifying changes are greatly delayed in the subsequent treatment of the sewage."

In view of the difficulties in building and maintaining an absolutely tight cistern, the septic tank should never be installed in a district where the use of well water is permitted. Even where the water supply is beyond the reach of possible contamination, there is some risk of polluted soil and ground-air. While admitting the facts that the septic tank does much to solve the sludge problem and that its cost of operation is practically nothing, I am strongly inclined to the belief that, as "the only good Indian is a dead Indian," so, on sanitary grounds, the best septic tank is one which has not been built.

The septic tank is the extreme exponent of rapid putrefactive methods for disintegrating the solids of sewage. At the other pole, representing the methods of inoffensive aerobic decomposition, stand the processes of Lowcock and Waring, which treat sewage by passing it through filters filled with very porous material, and thoroughly aerated in all their parts by a current of air forced into and through the beds. Such filters combine the maximum of purification and the minimum of land requirement. A space eight feet square will purify, to a drinking water standard, one thousand gallons of sewage

per day. When the effluent is to be discharged into a stream not used as a source of domestic supply or for the watering of cattle, such a high degree of purification is unnecessary, and the sewage can be applied to the beds at considerably greater rates. The operation of these filters involves the expense of running a fan or blower; but this is inconsiderable, especially if electric power, which needs no engineer, be used. Filters of this sort are in operation in Brooklyn, at Willow Grove Park, Pennsylvania (a suburb of Philadelphia), and elsewhere. At Willow Grove, which has a deficient water supply, the pure effluent is pumped into a secondary reservoir and is used for supplying the toilet-rooms and lavatories, and for sprinkling the streets. The men in charge of these plants drink the water freely.

Between these antipodes of putrefaction and decomposition, stand many composite processes, which lean towards one method or the other, or combine both equally. Each claims some special advantage, but all are based on the broad principles of natural bacterial decay and work toward the same end. No one system can be recommended as the best for all cases. Hygienic considerations and economical adaptation to the varying local conditions should be the determining factors. The first is of prime, and the second of subsidiary importance.

In view of the ever growing probability of enforced purification of sewage, cities and towns should keep before them, clearly differentiated, the conditions which will facilitate or make difficult the installation of a purifying plant. By far the most important desideratum is the maintenance of a flow of sewage uniform in quantity and in strength. Free use of water is certainly a most important factor in maintaining the cleanliness—and therefore the health—of a community; but the most lavish ablutions of person, house and utensils cannot account for the immod-

erate floods of water which pour through the sewers of many a town and city. Forty gallons per head per day will suffice for an extreme luxury in cleanliness—yes, for a veritable ablutionary dissipation. The fouling of water beyond this limit adds nothing to the comfort or well-being of a single individual; but it increases greatly the cost of water supply (especially if filtration be necessary), and the expense and difficulty of sewage disposal. To minimize the flow of sewage, three avenues must be guarded.

First—The sewers must be made tight enough to keep out ground-water. In a literal sense, this is impossible; but serious leakage can and should be prevented. The water of the soil is normally clean. Wherever its removal is advisable, it may be collected by drain tile, laid in the same trench with the sewer, and may be discharged, without treatment, into the nearest watercourse. If allowed to mix with sewage, it will require the same treatment as sewage, and its added bulk will necessitate the enlargement of the purification works.

Second—The same reason is cause enough for the exclusion of storm-water from the sewers; but there are other urgent reasons why its admission should be prohibited. Its flow is widely variant; and, although the processes of sewage disposal are reasonably elastic, irregularity of supply tends to destroy uniformity of results. Moreover, storm-water carries with it an undue proportion of mineral matter in the shape of silt and road detritus. This is harmless in itself; but, being inorganic, it cannot be destroyed, and its accumulation chokes the filters and in other ways proves a mechanical inconvenience.

Third—The waste of water should be prevented. By this I do not mean that use should be restricted—not even excessive use; but the waste which never comes into contact with the consumer should be stopped. Leaking faucets should be rewashed; leaking ball

cocks should be adjusted, and fixtures and pipes exposed to frost should be protected so that the practice of allowing water to run continually, to prevent rupture, will have no excuse for its extravagance.

Another complex problem which demands thoughtful and delicate, though decisive treatment, is the extent to which manufacturing wastes may be admitted to the sewers of a city.

A discussion of the intricacies of this subject and the careful balancing of the varying arguments which enter into such a discussion are manifestly beyond the scope of this paper. But this broad general principle may be enunciated: That the community at large should not be expected or permitted to pay an undue amount for the disposal of its sewage because of the excessive quantity, abnormal foulness or peculiar chemical composition of the wastes produced by an individual or a corporation. So long as these wastes can be cared for without damage to the sewers without undue enlargement of the sewerage works and without increase in the difficulty or cost of purification, there is no reason why admission should be refused. But when any of these provisions are infringed, the objectionable liquid should be excluded, or the manufacturer should be compelled to pay a just proportion of the expense of treatment.

In spite of the apparent complexity of the problems to be solved and the bewildering variety of the schemes which are offered as solutions, this fact has been clearly established, that any community can purify all its own wastes, upon its own premises, without offense, and at a reasonable cost: and that, so far as its sanitary obligations to other communities are concerned, it can put itself in a position which is not only impregnable but absolutely unassailable.



## Wood Paving in the East.

[A paper read by M. A. Downing, President of the Board of Public Works of Indianapolis, at the meeting of the Society of Municipal Improvements. Reprinted from *Municipal Engineering*.]

**B**EFORE, and when, I became a member of the Board of Public Works a number of years ago we often had property owners say, "Why can't we have such wood pavements as we see in Paris, London and other European cities? They seem to be so much cleaner and quieter than asphalt or stone." They insisted that there was a fine dust, a glare, a noise and heat that were positive discomforts, which they could escape to a great extent if they could have a wood pavement, and if we could give them a durable wood pavement they wanted it, and many wanted the wood without conditions, and many petitions for it were presented.

A careful study of wood pavements in this country and Europe followed. There can be no doubt that the consensus of opinion in this country is that the wood block pavement as commonly known has not been a success. It seems strange that the glaring defects—one might almost say the kindergarten defects—of those pavements had not been noted and eliminated, but they were not, and millions of square yards of wooden block pavement have been laid and are yet being laid, the only foundation for which is plank laid on sand. The blocks were cut from round, green cedar posts, with the sap-wood left on, and in some instances the bark. These blocks, without further preparation, were laid on boards, some gravel tamped into the joints and covered with coal tar. It would seem almost absurd to call such a structure a pavement. In saying this, I am not forgetting the Nicholson pavement, the principal defect of which was the lack of suitable wood. It seems to me that all the ingenuity and inventive genius of that time was exercised along the line of discovering some odd or novel way to cut and lay the blocks, or to bind and

lock them together. As far as I have been able to discover, these things were of little avail. The cardinal defects were:

First. Failure to select wood with sufficient strength and toughness to withstand the loads and abrasions, and

Second. The total absence of any attempt to create conditions to prevent the rotting of the blocks.

Just why it was considered necessary to select white pine and cedar when the country abounded in the harder and stronger woods it would be difficult to conjecture, but the fact remains.

And why no adequate effort was made to properly season and treat the wood I leave to engineers to answer. It may have been because it was a new field and explorers are scarce. Certainly it is that if any architect had attempted to build a house of such material treated in the same way he would have been severely criticised by his professional brethren, to say the least.

As a result of our studies of wood pavements, we decided to require the concrete foundation in every instance. We first laid Washington red cedar, rectangular blocks without treatment of any kind. This wood was very soft and porous. It was practically the Nicholson pavement. The blocks were laid close together on a one-inch cushion of sand over the concrete. Two heavy traffic resident streets were laid in this way and they are now in their fifth year; both are considerably worn on account of the softness of the blocks, while here and there rotted blocks are visible. Washington red cedar was still in the specifications when I became a member of the Board of Public Works. A provision was inserted providing for creosoting, but the specifications were indefinite. The following spring and summer, 1896, four streets were paved with creosoted (about three

pounds of oil to the cubic foot of wood) Washington red cedar. These blocks were 4 inches wide and 5 inches with the grain of the wood. The blocks were laid in rows at an angle of 45 degrees with the curb. All of these pavements are in excellent condition at this time, and on parts of them the traffic is heavy. No provision was made for expansion, the blocks were driven as close together as could be with a sledge and the joints filled as far as could be with paving pitch. We have had some trouble caused by the blocks bulging.

Most of this was on streets where the blocks were not creosoted, but we have had a few cases where the blocks bulged on the streets last mentioned, but nothing serious. The specifications were then changed, providing for the heartwood of the long leaf southern yellow pine, with the blocks 4 inches wide, 4 inches deep with the grain of the wood, and impregnated with ten pounds of the best quality of creosote oil. These blocks were laid in the manner above described, except that a space of from 1 to 2 inches (according to the width of the streets) was left between the curb and the blocks for expansion. This space was filled with dry sand and covered over with heated paving pitch. The interstices were partly filled with fine, dry sand and the street surface rolled to a smooth surface before covering with heated paving pitch and top dressing with fine gravel or screenings. In no instance have we had any trouble on any of these streets from the blocks bulging. The surface of these streets is as smooth as a floor, and has a soft brown color that is restful to the eye. Under the heaviest traffic no wear is as yet noticeable and the streets are in perfect condition. The oldest is about three years old. It appears that the dirt on these pavements does not grind into such fine dust as it does on the asphalt and consequently is not as unsanitary nor annoying. The cost of cleaning is less than brick or asphalt, for the reason

that we do not have to clean as often. We often hear complaints of the heat that comes from the asphalt on hot days. This does not seem to be common to the wood, but the one quality that seems to be pre-eminent is noiselessness. I think that people pay more attention to this quality, of late years, than they use to; in fact, they now often demand it, whereas, when I was a younger man, people would speak of it as desirable, but were not willing to be assessed anything extra on that account. We feel that the creosoted wood block pavement is a success from every point of view. We believe that, constructed of the material we are using (or other strong woods, like beech, tamarack, red or yellow fir), properly creosoted, using first-class quality of creosote without adulteration, that the pavement is more durable than asphalt and brick and nearly as durable as granite. It certainly has met with an enthusiastic reception in this city, as is testified to by the great demand for it. We have contracted for about three times as much of it this year as we have for asphalt. There is practically no demand for stone or brick in this city except for alleys.

We have not adopted the European method of spacing the blocks from a quarter to a half inch apart and filling them with Portland cement grout, but I am not sure that their practice is not preferable. We have found up to this time that our present practice is good, and our engineer hesitates to depart from it although I must say that when the blocks are driven so close together it is next to impossible to get any filler in the joints. This may cause swelling later, although I hardly think so.

We have thus far not followed the common European practice of making the surface of the concrete perfectly smooth and laying the blocks directly thereon, but have introduced the one-inch cushion of sand. But if we are called upon to pave heavy traffic streets we will probably do so, as ex-



perience in both London and Paris has shown that the practice has been successful, as the Rue de Rivoli, over which passes 42,000 vehicles per day, and King William street, the heaviest in London, are both paved with wood in that way. Few people understand the efficacy of creosoting; why the wood seems harder, tougher and more durable. It is simple: Wood dried to 10 per cent. moisture has about double the power to resist crushing and abrasion that it has if very wet. In creosoting, the sap and moisture are removed and the heavy oil (creosote) which repels moisture becomes encysted in the fiber of the wood. When snow and rain lie on the pavement, they may get to some extent into the cells, but not to any great extent into the fiber, because it cannot displace the oil; hence the fiber remains dry, and, of course, retains its strength. The uncreosoted wood pavements wear doubly as much in wet weather as they do in dry weather. This is not true of the creosoted wood pavements for the reasons above given.

I might say a word in regard to cost. This would probably vary according to the distance the blocks would have to be freighted. The pavement laid with long leaf yellow pine blocks, 4 inches deep, treated with ten pounds of the best quality of creosote oil per cubic foot of wood, laid on a concrete foundation complete, and guaranteed for from five to nine years, has cost us from \$2.10 to \$2.50 per square yard.

### ❧ ❧ ❧

### The League Convention.

The following is the completed program for the annual convention of the League of California Municipalities, which will meet at Pioneer Hall, San Francisco, on December 13, 14 and 15.

#### PROGRAM.

Wednesday, Dec. 13, 2 P. M.

- 1 Roll call of Delegates.
- 2 Address, Pres. J. D. Phelan.
- 3 Reports of Officers.
- 4 Subject—"The future work of the

League."

Mayor Snow, Oakland.

Mayor Brooks, Marysville.

Mayor Hutchinson, Palo Alto.

Mayor Eaton, Los Angeles.

Mayor Capps, San Diego.

General Discussion.

- 5 Proposed Amendments to By Laws to be referred to committee.

- 6 Question Box.

Evening.

Address, David Starr Jordan, President of Stanford University. Subject: "A Continuing City."

Thursday, Dec. 14, 10 A. M.

Subject: "Street Improvement Acts."

15 minute papers by

F. K. Lane, San Francisco.

W. A. Beasley, San Jose.

George Pearce, Santa Rosa.

E. K. Taylor, Alameda.

B. A. Hayne, Berkeley.

City Attorney Haas, Los Angeles.

General Discussion.

Afternoon.

Subject: "Experience of Cities with Municipal Water Works."

T. H. Carr, Nevada City.

Mayor Sweet, Santa Rosa.

Mayor Lamb, Santa Cruz.

Mayor Druffel, Santa Clara, and others.

General Discussion.

Evening.

Fifteen minute papers on the following subjects:

"Municipal Licenses," C. N. Kirkbride, San Mateo.

"Value of Municipal Libraries," F. J. Teggart, San Francisco.

"Municipal Engineering," C. D. Marx, Palo Alto.

"Electrical Terms," Prof. L. L. Corey, Berkeley.

"Sanitary Regulations," Dr. C. L. Lubbock, Alameda.

Friday, Dec. 15, 10 A. M.

Report of committee on amendments to by-laws and action on same.

Election of Officers.

Opening of Question Box.

Adjournment.

Afternoon and Evening, Entertainment.

## Discussion of the Government of Cities.

The fifth annual meeting of the National Municipal League and the seventh national conference for good city government opened in Columbus, O., Nov. 15. The dominant feature of the discussion was the "municipal program," which was offered as the report of a special committee appointed at the meeting in Louisville two years ago. This municipal program is based on the theory that good city government is dependent not merely upon a proper form of municipal organization, but as well upon a proper determination of the position of the city and upon the ability of the citizen to decide municipal questions on their own merits.

In order to permit the decision of these questions on their own merits, the program provides "for personal registration of voters and nomination of city officers by petition signed by not more than fifty voters. An official blanket ballot, with the names of the candidate, arranged in alphabetical order under the title of the office, obliges the voter to vote separately for each candidate for whom he votes, and makes it necessary that all municipal elections shall be held at a different time from state and national elections."

A report was made by Clinton Rogers Woodruff of Philadelphia, who said: "The league stands pre-eminently for a consideration of municipal questions separate and apart from state and national politics. It is coming to be more generally recognized than ever before, as a result of the agitation persistently maintained by the league and its upward of one hundred affiliated organizations, that state and national politics should have no part in municipal affairs."

A number of instances were cited by Mr. Woodruff to show that this principle is securing recognition. Baltimore elected a mayor last April because he represented this idea. Mayor Jones of Toledo was elected because his candi-

dacy represented the pre-eminence of municipal affairs.

The re-election of Mayor Carter Harrison in Chicago is ascribed, not to his participation in state and national politics, but to the fact that he represented a definite stand upon a definite local question. Secretary Woodruff referred to the efficient work of the City Club and the Reform Club of New York, of the "Trenton Movement," where an eight days' campaign to arouse the people of that city to their duties as citizens was successfully conducted by the League for Social Service; of the enviable record of the Municipal League of Philadelphia, and the results accomplished by the Baltimore Reform League. He also presented encouraging views of the progress of the good government movement from Richmond, Chattanooga, Cleveland, Detroit, Milwaukee, Minneapolis, Portland, Ore., St. Louis and other cities. A paper was read by D. F. Wilcox of Elk Rapids, Mich., on "An Examination of the Proposed Municipal Program," in which he said:

"There are three fundamental evils in the government of our cities. The first is economic, and consists in the waste of public funds. The second is political, in the true sense, and consists in the inadequacy of municipal service. The third is moral, and consists in the corrupt use of civic authority for the furtherance of individual ends. The chief importance of this third evil lies in the fact that it throws politics into disrepute and degrades civic ideals, thus rendering co-operation for the attainment of truly political ends well-nigh impossible."

James C. Carter of New York, president of the National Municipal league, held that there should be no constitutional limit to the power of cities to issue water bonds and bonds for similar purposes, as ordinarily the earnings of water plants are sufficient to pay interest and eventually to take up the bonds.

Dr. Frank J. Goodnow discussed the



feature of the program which seeks to eliminate partisan politics from city elections, strongly favoring a secret ballot and nomination by certificates. He said:

"Political parties interest themselves in municipal politics because cities are important agents of state government and in order to make use of the city to strengthen the party organization. To reduce the temptation of political parties to interfere in municipal politics cities should, so far as they are acting as agents of the state—i. e., in the care of the police, the schools, the public health and so on—be subjected to state control. This control should be exercised by administrative bodies rather than by the state legislature, for the legislature, being in the nature of things a political body, is apt to make use of its control in the interest of the political parties. Much progress has been made already in this direction in the United States. Further, the power of the party to make use of city patronage in its own interest should be destroyed."

Horace E. Deming, of New York, called attention to the fact that the proposed municipal program makes home rule an absolute fact and makes the city a representative democracy. He said: "One of the problems which the proposed municipal program undertakes to solve is to provide a form of city government which will compel the development of an effective and general interest among the voters in the conduct of the public affairs of the city and upon which the public opinion of the voters, when deliberately expressed, will be effective. The city under the proposed plan is a representative democracy. Unable to resort to outside assistance and secure outside interference, compelled to work out its own local destiny, and clothed with ample powers to do so, the very necessity of the case will develop an enlightened public opinion, which will control the public policy. The people are the government."

Officers were elected as follows: President, James C. Carter, of New York; first vice-president, Charles Richardson, of Philadelphia; second vice-president, Samuel B. Capen, Boston; third vice-president, Thomas M. Strong, Portland, Or.; fourth vice-president, H. Dickson Burns, New Orleans; fifth vice-president, Edmund J. James, Chicago; secretary, Clinton Rogers Woodruff, Philadelphia; treasurer, George Burnham, Jr., Philadelphia.



### **Watsonville's New Sewer System.**

The new sewer system of the town of Watsonville is now fully completed. It embraces about thirteen miles of sewer pipe and the total cost was approximately \$37,000. The outfall extends to tide-water three miles from the city. It is complete in every detail, being equipped with automatic flushes and amply ventilated. In other words, it is an up-to-date system and the citizens seem to appreciate the improvement. The construction was done by Williams, Belser & Co., of San Francisco. The bond issue was \$40,000, which was sold for a premium of \$4,123. The surplus remaining will probably be used for street improvements. The new sewer system is made effective by a very stringent sanitary and plumbing ordinance, which has just been adopted.



### **A Complete Sewer System.**

The plans for a system of main drainage for San Francisco which have just been submitted are more comprehensive than was contemplated last April, when the matter was taken up. It was found that in the flat portion of the city the grades were too light to give efficient service as gravity sewers, and, as thoroughness in every detail was determined upon, it was found advisable to adopt the separate system for two large and important districts and to use the existing large sewers in these dis-

tricts as storm-water conduits.

Hence, there is not only included in the estimate the cost of main sewers for all parts of the city, but also a complete and thorough system of collecting and main sewers for flat portions now suffering for the application of the simplest principles of sanitation.

These works are designed to place San Francisco ahead of all other cities of her size on this continent, for they add what science can to her unrivaled natural situation and will make our city the most desirable place for homes on this Coast.



### **Assessments for Sidewalks.**

Judge Sayre of the city court of Montgomery, Ala., has rendered a decision in a case in which the question was upon the constitutionality of a sidewalk paving tax. The tax was assessed by virtue of charter provision empowering the city council to pave the sidewalks and assess the cost upon the abutting property. The owner of certain property refused to pay and the property was offered for sale under the charter in order to collect the paving tax. Judge Sayre held that the court must be guided by the decision in the case of the village of Norwood vs. Baker in which the Supreme Court of the United States on Dec. 12, 1898, declared that "the exaction from the owner of private property of the cost of a public improvement in substantial excess of the special benefits accruing to him, is to the extent of such excess, a taking, under guise of taxation, of private property for public use without compensation; and this is forbidden by the constitution."



### **Recent Experiments in Sewage Disposal.**

Prof. Dwight Porter delivered a lecture before his class in sanitary engineering at the Massachusetts Institute of Technology on Nov. 15, describing the most recent experiments in sewage

disposal. He first took up Col. Waring's system, and then brought before the class a working model of the system now used in Brentwood, N. H. That town had experienced a great deal of trouble in its sewage because there was no stream of water large enough to flush a sewer. The system which they have now adopted runs the sewer through a septic tank and a rapid filter, both under the same roof. The water issues from this apparatus tasteless, colorless and odorless. People often drink from it for a test.

The sludge from the bottom of the septic tank is then used as a fertilizer, and the superintendent of the farm says it is more valuable for plants than stable manure is.



### **Sterilization of Drinking Water.**

A way of sterilizing drinking water by means of peroxide of chlorine has been indicated by the Rivista d'Igiene of Turin. The method is termed the Berge process. Peroxide of chlorine is so powerful a bactericide that three grammes will sterilize one cubic meter of water at a cost of less than half a centime. One objection is that it is only efficacious in the case of drinking water not very impure. The method has obtained a unanimous vote in its favor from the consulate committee of public hygiene in France, and it has yielded satisfactory results at Ostend and Middelkerke.



### **Domestic Production of Asphaltum and Cement.**

The report of the United States Geological Survey for last year shows that the production of cement in the United States increased from 10,989,463 barrels, valued at \$8,178,283 in 1897, to 11,968,708 barrels, valued at \$9,781,501 in 1898; the production of asphaltum increased from 75,945 tons, valued at \$664,632 in 1897, to 76,337 tons, valued at \$675,649 in 1898.



## Recent Court Decisions.

### The Santa Cruz Bonds Case.—

Circuit Judges Gilbert and Ross and District Judge Hawley, sitting as the United States Circuit Court of Appeals, handed down two opinions on Dec. 4 in the case of Albert H. Waite vs. The City of Santa Cruz. The majority opinion by Judges Ross and Hawley reversed the judgment of the United States Circuit Court and remanded the case, with directions to enter judgment for the defendant. The minority opinion by Judge Gilbert sustains the action of the lower court and gives precedents and reasons therefor.

The majority opinion goes on to say that the action was brought to recover the amount alleged to be due on nine refunding bonds and 282 interest coupons attached to the same and to other refunding bonds issued by the city of Santa Cruz. That city had an outstanding bonded indebtedness of \$271,000, and was also the owner of certain water works purchased by it from the City Water Company of Santa Cruz. The water works were subject to a mortgage to secure the outstanding bonded indebtedness of that corporation in the sum of \$89,000 and interest.

One of the attorneys for the city of Santa Cruz gives the following synopsis of the case:

"The suit entitled City of Santa Cruz vs. A. H. Waite was a proceeding by writ of error in the United States Circuit Court of Appeals to review and reverse a judgment rendered by the United States Circuit Court on September 29, 1898, against the city of Santa Cruz upon certain municipal bonds and involving the validity of what is known as the refunding bond issue of April 16, 1894, amounting to \$360,000.

"The decision rendered holds that the entire bond issue in question was void upon the ground that a considerable portion of the indebtedness sought to be refunded was the indebtedness of the City Water Company of Santa Cruz, a private corporation, and that the refunding act of March 1, 1893, under which the bonds were issued, provided only for refunding municipal indebtedness evidenced by the bonds or warrants of the city; that all purchasers of the refunding bonds were therefore bound to take notice of the limitations im-

posed by the act and were bound at their peril to examine the ordinance and notice of election on the question of refunding by which alone the Mayor and Common Council obtained jurisdiction to issue the bonds.

"That ordinance and notice of election contained statements and recitals showing that the bonds were issued in part for an illegal purpose, and as it appeared from the findings of the Circuit Court that the bond issue for the purposes provided for by law could not be segregated from the bonds issued for the illegal purpose, the Court of Appeals held the entire bond issue to be effected by that illegality and therefore void.

"The city of Santa Cruz never received any consideration whatever for the refunding bonds; they were delivered to the firm of Coffin and Stanton upon a nominal sale, but really to be sold to that firm for the city of Santa Cruz.

"Coffin & Stanton, being at the time in falling circumstances, proceeded at once to sell and hypothecate the bonds for account of the firm and as collateral security for the firm's debts, appropriating the proceeds and making no return to the city of Santa Cruz.

"At this juncture the firm of Coffin & Stanton failed, leaving debts amounting to about \$2,000,000 and assets worth about one tenth of that amount. The city of Santa Cruz immediately repudiated the bond issue on several grounds, including the ground on which the Circuit Court of Appeals has adjudged the bonds invalid. Most of the bondholders then formed a pool and assigned their bonds to Albert H. Waite, who commenced a suit, in which the decision has just been rendered. This decision is final unless the bondholders shall secure a reversal by the United States Supreme Court."

### No Inherent Right to Sell Liquor.—

Judge Buckles of Solano county recently rendered an important decision regarding ordinances governing the issuance of liquor licenses in municipal corporations of the sixth class. Joseph Vieira is a resident of Rio Vista and asked the court to grant him a writ to command the Town Clerk and Town Marshal to issue to him a license to sell spirituous, malt or fermented liquors within said town in less quantities than one pint. The officers refused to grant the license, as the petitioner had not complied with a certain town ordinance, which required any person desirous of conducting a saloon to present a petition to the Board of Town Trustees signed by twelve resident free-

holders residing upon the street on which the saloon is proposed to be opened.

Vieira made no effort to comply with the ordinance. There were not twelve resident freeholders residing upon the street. Vieira claimed this portion of the ordinance was unreasonable and oppressive and void.

Judge Buckles said: "Our courts have held in effect that the sale of intoxicating liquors is not to be classed as the sale of useful and beneficial commodities, but that their sale may be prohibited. Rio Vista could by ordinance prohibit the sale of intoxicating liquors within the corporate limits of the town. There is no inherent right in any citizen to sell liquor by retail. The petitioner was not entitled to the writ sued for and a demurrer against the same is sustained."

## What the Cities are Doing.

Bakersfield is soon to enjoy the luxury of paved streets.

The town of Hanford has adopted a street numbering ordinance.

Berkeley has passed an anti-nickle-in-the-slot-machine ordinance.

Santa Clara's bonds for \$30,000 for constructing gas works will soon be ready for sale.

Healdsburg has found an abundance of artesian water on the site of the city's water works.

The town of Ventura expended during October about \$1,500 on the construction of main and lateral branch sewers.

City Engineer Goucher has prepared plans for a complete sewer system for Long Beach. The estimated cost is \$32,000.

Alameda has taken the initiatory steps towards calling a freeholder's election with a view of securing a new charter.

The Municipal League of Alameda has recommended the issuance of \$35,000 of bonds for the purpose of increasing the educational facilities.

Vallejo has let a contract to the Dundon Bridge Co. for the construction of a new wharf at the foot of Virginia street, the contract price being \$9,800.

San Jose has solicited a contribution from Andrew Carnegie in aid of the erection of a

new library building. About twenty cities in the state have appealed to Mr. Carnegie for the same purpose.

The injunction suits against the city of Healdsburg to restrain the construction of the municipal light and water works have been decided in favor of the city.

Redwood City people are a class that wish to see their town advance and improve. A movement is now on foot there to establish a park and to this end \$250 has already been subscribed.

Redwood City reports that the prospects for an improved public library and free reading room are bright. The public park project is booming. An enlarged and commodious court house is in sight and cement sidewalks are going down on the principal thoroughfares.

On Dec. 27 San Francisco will vote on the proposition to issue bonds to the amount of \$4,500,000 for the park extension. On the 29th inst a vote will be had on the proposition to issue bonds to the amount of \$4,600,000 for a better sewerage system, \$475,000 for a new hospital and \$1,400,000 for new school houses.

About four months ago Andrew Carnegie offered to present to San Diego a \$50,000 library building, provided the city furnished the site. A discussion took place as to where it would be located and for months the city officials, press and citizens have been wrangling over the matter. Now comes the report that Mr. Carnegie has withdrawn his gift.

Redlands people are wonderfully favored in the possession of so large a free public library. In many places farmers have no means of obtaining access to books, other than buying for themselves. This has led to farmers' book clubs, which is a good plan, as twenty or thirty families thus divide the cost. But Redlands farmers have access to a free library of over 5,000 volumes. Many very much larger cities than Redlands cannot make as good a showing.

### Personal.

Geo. W. Robbins has been elected City Clerk of San Luis Obispo to fill the vacancy caused by the death of J. A. Goodrich.

F. O. Misner has been appointed Electrician for Palo Alto's new electric light plant.

M. P. Carpenter has been appointed Town Trustee of Dixon in place of S. G. Little, resigned.

C. A. Storke has been elected Mayor of Santa Barbara.



# California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.  
B. F. LAMBORN, - - - - - Business Manager.

Office of Publication, Room 14, Eighth Floor, Mills Building, San Francisco, Cal.

Subscription Price, - - - - - One Dollar a Year.

Right now MUNICIPALITIES wishes to refute the general assumption that municipal government is corrupt government. For many years past the general public has had it continually dinned into its ears that our municipalities were awful examples of official mismanagement and corruption; that the officials generally were a set of bribe seekers, ever ready to "hold up" every one who had dealings with the city and that their sole object was to see how much money they could spend in places "where it would do the most good." This is doing the cities a gross injustice. Official corruption of city officials is the exception and not the rule. If it were possible to show the facts, our cities would, as a whole, show as economical a government as that of our state and nation.

There are over one hundred incorporated cities in California. Now who can name half a dozen out of this number that have the reputation of being corruptly mismanaged. Of course there are some corrupt officials, but they are comparatively few. And when they are found out they are very seldom re-elected. In the main our cities are honestly governed. Our mismanagement comes largely from ignorance and not from innate depravity. In reality our mismanagement is the result of our system of government; from our laws that give our municipalities. It comes from the sale of franchises and the creation of special privileges. It comes from our system of contract service forced upon us by law. To a great extent it comes from the fact that our officials are not

"schooled" in the business of municipal management.

Whence comes the cry of official corruption? Much of it comes from disappointed contractors—nearly every contractor whose bid it rejected ascribes the cause of its rejection to a lack of a "pull," or that there was a "job" in the specifications or that the officials had been "seen" by a fortunate rival, or that some mysterious influence had deprived him of what was justly his. And the press, ever ready for a sensation, pick up the tale of woe and by the use of words that the editors best know how to use, magnify and distort the circumstance out of all semblance to the facts of the case. And the public, ever ready to believe evil report rather than good, comes to the conclusion that this corruption is wide-spread and almost universal.

Defeated officials frequently ascribe the cause of their defeat to an alleged; and frequently doubtful, high stand taken by the aforesaid candidate in refusing to stand in with some nefarious probably imaginary—job. Discontent is a prolific breeder of scandal. Persistent rumors of jobs and official misdoings have caused many a good man to retire from official positions with a profound disgust with official life and with a feeling of resentment against a credulous constituency that believed the most absurd rumors concerning his official conduct. The private citizen does not know, nor does he appreciate the troubles of the ordinary city official; nor does he care to investigate these things. The great wonder is, that after these many years of slander and misrepresentation of our public officials that we are able to get as many good and worthy men as we do, to sacrifice their time and talents for the public good.

The fact has been deemed sufficiently important to warrant the publication of a statement that at least half a dozen of the newly-elected Supervisors of San Francisco are University graduates. It certainly is an encouraging sign when our most highly educated men are willing to accept the duties of ministering to the needs of our cities. It shows that we do not have to go to the gutters to find our municipal statesmen. While it does not follow that a University graduate will make a better and more honest official than one who is not, it does prove that intelligence can be applied to municipal management, and with intelligence there is reason to hope for progress.



Whenever a fellow comes around and hints that he has got a good thing for the city to have and suggests that he can make it an object for you to "stand in," you Mr. City Trustee or Councilman can just make up your honest mind that his "good thing" is too good for your town. It will cost your town just three times what it is worth to get it. Furthermore, if you "stand in" you will have the reputation of being a boodler, whether you are or not. Leave all such schemes and cattle alone and you and your city will be better off. We know what we are talking about.



In the November number of this magazine was published an article on "Street Lighting Contracts" wherein it was suggested that it might be a good plan for municipalities to make contracts for current by meter measurement, instead of by the lamp. There is scarcely a city in this state that is satisfied with the quantity and quality of its light service; and there is no convenient means of knowing whether or not a city is getting its money's worth. We all know that a 2000 candle power

arc lamp cannot give 2000 actual candle powers, and consequently a contract based on candle power is without any certain and known basis. Tests for candle power are scarcely practicable and so cities are forced to content themselves with such service as the contracting company is pleased to furnish. Furthermore, it is difficult to keep account of outages, in order to make deductions. These difficulties would be obviated by the purchase of the electric current. The suggestion is one that city officials would do well to consider.



It has become a fixed custom with all the prominent institutions of learning to require every professor to take a leave of absence and go East or to Europe to study and to "get on" to any new ideas that may be springing up in some distant part of the world. He returns with these ideas to the good of the institution. The same course is being followed by industrial concerns who send their superintendents abroad in search of new and improved methods. Now then, would not it be a good idea for municipalities to do this very same thing. Give your engineers, street superintendents, your mayors and chiefs of fire departments a leave of absence for a month or two each year; send them on a tour of inspection to other cities and pay their traveling expenses. Tell them that they have got to bring back some new ideas. Ten to one it will be a paying investment to every city that does it.



This office is in receipt of the municipal code of the City of Napa. This is the proper form for all ordinances that are permanent in their nature. It is simple and convenient and the work in the case of Napa seems to have been well done. Other cities would do well to codify their ordinances in a similar manner.



One of the puzzles which was created by the last legislature and which will soon have to be solved by judicial minds is the new registration law. Just how a register is to be made for municipal elections is the question to be ascertained. It must be construed in connection with the new municipal elections law which was approved the same day as was the registration law. In these acts it is provided that a new registration shall take place on January first 1900. It is also provided that at municipal elections the great register used at the last preceding general election shall be used with the additional names subsequently registered. Well, the City Attorneys will have a chance to earn their salaries when they come to study these new laws.



Thus far we have been able to establish communication with seventy cities through the local press and are thus able to tell what most cities are doing. We still want about thirty-five more exchanges from as many cities and then we can have a complete municipal record. Until then, some cities will necessarily be slighted.



The Bureau of Information of the League has commenced the work of gathering a fund of information. The first work is to gather together the specifications adopted by the cities for various public works. But this information is coming in very slowly. A few copies of specifications for sewer construction and for water and light works have been received. But we want more.



Do not for a moment imagine that the League of California Municipalities is a "Reform" organization and that its members belong to the class of professional "reformers." How can they be?

They are public officials. It isn't their province to re-form anything. They aim to be more than mere reformers—they are improvers. Please note the difference. We believe that it is possible for us to improve municipal conditions without turning things topsy turvy.

The San Jose *Mercury* in an extended editorial on the subject, "The League of Municipalities," makes the following very sensible observations:

The State league is a branch of the American league, which body, although organized only three years ago, has effected many reforms and has been a source of valuable information to every municipal member of the league. There is no politics in the national or the State league. The sole objects of each are the perpetuation of the organization as an agency for the co-operation of American cities in the practical study of all questions pertaining to municipal administration; the holding of annual conventions for the discussion of contemporaneous municipal affairs, and the establishment and maintenance of a central bureau of information for the collection, compilation and dissemination of statistics, reports and all kinds of information relative to municipal government.

These are certainly objects the attainment of which are worthy the active exertion of every municipality in California, as well as elsewhere. No subject of public concern is more important than that of municipal government, and not one is attracting at the present time greater attention on the part of thoughtful and earnest citizens. The conviction is growing that the ignorance and the corruption displayed in the management of the majority of cities in the United States threaten to undermine the very foundations of the republic itself, and that nothing short of thorough municipal reform can place the country beyond the exigency of defective or vicious laws, excessive taxa-

tion, and all the evils which necessarily follow in their train. When the cities have become models of government the people can look with confidence to wholesome county, State and national government, in all their various departments.

It is a significant and a lamentable fact that the concentration of population in the cities is increasing in a dangerous ratio. The municipal problem, therefore, sufficiently serious in itself, of late years has risen to the dignity of a national problem, for upon its proper solution depends the ultimate stability of the nation itself. Hence it is doubly incumbent upon municipal bodies to avail themselves of every practical source of information concerning the best methods of government, and upon every urban citizen to give the subject of simple, economical and business-like municipal administration the most earnest and conscientious study.

To this end it is advisable that California cities and towns attach themselves to the league. The league works in a broad way and along practical lines. Its bureau of information collects and distributes information in regard to every possible phase of municipal life, such as the inspection and sale of milk; telephone rates; life of street railway franchises; methods and cost of street construction, maintenance, sweeping and sprinkling; comparative cost of street lighting; methods of garbage disposal; care and maintenance of sewers, and a hundred other things with which every city has to do. With all these questions is intimately connected the material, social and moral welfare of the cities.

**C. E. Moore, C. E.**

(Mem. Am. Soc. C. E.)

**Consulting Engineer** for Water Works, Pumping Plants, Electric Lighting Plants, Sewerage Systems, Steel Construction.

**Home Address, Santa Clara, Cal.**

C. B. WILLIAMS.

L. C. WILLIAMS.

J. H. BELSER.

## Williams, Belser & Co., General Contractors.



Builders of . . .

**WATER WORKS,  
SUBWAYS,  
PAVEMENTS,  
SEWERS, ETC.**



Office: 302 Montgomery Street,  
Room 2,  
**SAN FRANCISCO, CAL.**

## Phoenix Foundry,

O'CONNELL & HENNEBERRY.

Phoenix Iron  
AND  
Structural Works.

Manuf. of all kinds of

## Iron Work.

Bids and Specifications Furnished.  
Culverts, Man-hole Tops.  
City Street Work in general.

**Cor. First and Castro Streets,**

OAKLAND.

**No. 40 New Montgomery St.,**

SAN FRANCISCO.



## List of Cities and City Officials.

*Concluded.*

**Redlands**—Population 4000, 6th class. Trustees—Wm Fowler (President), A. E. Brock, E. S. Foote, Ira G. Sprague, J. C. Chrisman; Clerk, L. W. Clark; Marshal, J. E. Wallace; Engineer, M. L. Lum; Attorney, T. R. Archer; Recorder, E. C. Warren; Street Supt., George Iveson.

**Suisun**—Population 500, 6th class. Trustees—E. E. Long, W. H. Bryan, E. P. Hilborn, W. B. Connolly, J. B. Shields; Clerk, O. B. Powers. Marshal, A. C. Tillman; Treasurer, M. Dinkelspiel; Attorney, O. R. Coghlan; Engineer, A. S. Morton; Street Supt., W. H. Bryan; Chief of Fire Department, J. A. Wilson; Health Officer, Dr. W. G. Downing.

### DEARBORN DRUG & CHEMICAL WORKS, CHICAGO, ILLINOIS, WATER & OIL CHEMISTS.

We analyze your boiler feed water free, furnish you with a copy of the analysis and prepare a vegetable compound to suit each water. Results guaranteed. No Guess work and no acids.

We study your steam plant conditions and furnish a lubricating oil to suit. All our oils are sold under seal and guaranteed to fulfill specified tests. Write for our booklet explaining our position. We are the largest boiler compound company in the world. Address Pacific Coast Agents,

**Levi Booth & Sons,** { 37 Second Street, San Francisco,  
334-336 No. Main St., Los Angeles.

# P & B

## Building Papers

## Ready Roofings

ALL DEALERS

MANUFACTURED ONLY BY

## Paraffine Paint Co..

## San Francisco

#### REFERENCES

Market Street Railway Co.  
Oakland Street Railway Co.  
California Cotton Mills.  
Western Meat Co.  
Palace Hotel. U. S. Mint.  
San Quentin Prison.  
Claus Spreckles' Bldg & Steamers.  
Board State Harbor Com. Steamers.  
Alameda Municipal Electric Plant.

**413 Claus Spreckles Bldg,  
SAN FRANCISCO**

FACTORY AT LOS ANGELES, CAL.

## R. J. KERR & Co.,

SOLE MANUFACTURERS

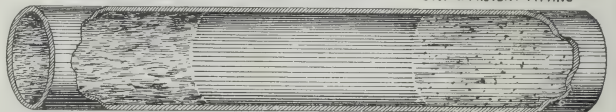
### KERR'S BOILER COMPOUND,

GUARANTEED TO

REMOVE SCALE

PREVENT SCALING

STOP & PREVENT PITTING



TRADE MARK REGISTERED

MUNICIPALITIES will find it to their advantage to place advertisements of Proposals, Bond Sales, etc., in this Magazine. It reaches the class of people interested in public work.

# CALIFORNIA MUNICIPALITIES

VOL. I.

San Francisco, January, 1900.

No. 6.

## This Number Contains

The First Installment of the Full Proceedings of the Second Annual Convention of the League of California Municipalities including papers and general discussion on the subject of

## Street Improvement Acts.



The February Number will contain

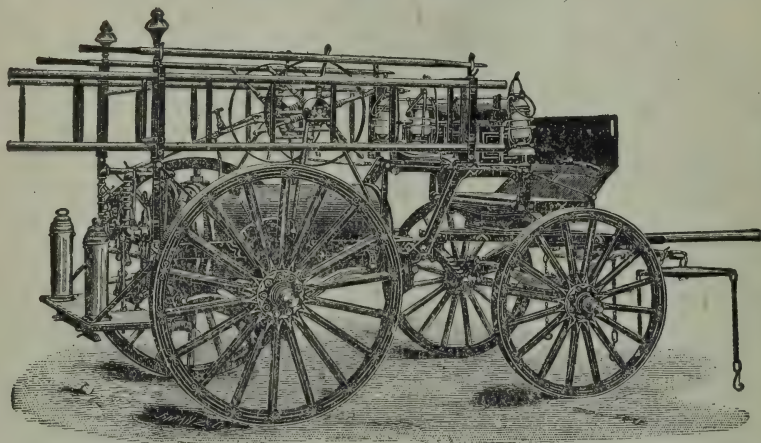
## Experiences of Cities with Municipal Water Works,

the Address of David Starr Jordan on the subject: "A Continuing City," papers on Municipal Licenses, Public Libraries, etc.

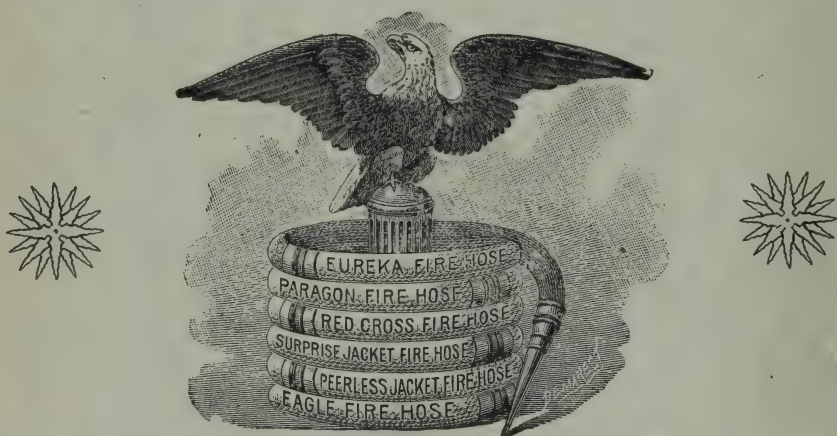


# Fire Engines, Trucks, Extinguishers

AND ALL FIRE APPARATUS.



Fire Hose and Rubber Goods  
OF EVERY DESCRIPTION.



## Goodyear Rubber Company,

R. H. PEASE, Vice-President and Manager,

573, 575, 577, 579 Market St.

SAN FRANCISCO, CAL.

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. I.

San Francisco, Cal., January, 1900.

No. 6.

PROCEEDINGS OF THE

## League of California Municipalities, SECOND ANNUAL CONVENTION.

The second annual convention of the League of California Municipalities convened at Pioneer Hall, San Francisco on Wednesday, Dec. 13, at 2 o'clock, P. M. The session was attended by the following city officials:

Alameda—B. F. Lamborn.

Berkeley—M. L. Hanscom, J. W. Richards.

Chico—E. E. Canfield, Richard White, Guy R. Kennedy.

Fresno—Taylor Albin, Joseph Spinney, John C. Moore.

Los Angeles—Fred Eaton.

Los Gatos—G. R. Lewis, R. F. Robertson.

Martinez—W. A. Hale.

Merced—W. H. Turner, D. K. Stoddard, R. Barcroft, J. Reininghaus.

Modesto—M. I. Sorrenson.

Napa—John T. York.

Oakland—R. W. Snow, A. H. Breed, H. D. Rowe, Z. T. Gilpin.

Petaluma—H. P. Brainard, M. Walsh.

Palo Alto—Joseph Hutchinson, Charles D. Marx, G. W. Mosher, G. D. Parkinson.

Redding—Carl R. Briggs, E. S. Watson.

Redwood City—George W. Winter, D. Mulen.

Riverside—Jos. W. Johnson, C. W. Finch.

Salinas—Chas. Francee.

San Leandro—J. M. Franks.

San Francisco—Jas. D. Phelan, L. F. Byington, J. A. Helmes.

San Jose—W. A. Beasley.

Santa Barbara—D. F. Hunt.

Santa Clara—D. O. Druffel, S. Oberdeener, C. E. Moore, H. A. Mason.

San Mateo—C. M. Morse, C. N. Kirkbride.

Santa Rosa—J. S. Sweet.

Sausalito—Dr. H. J. Crumpton.

Watsonville—D. F. Maher.

Yreka—O. A. Bennett.

Mayor James A. Phelan, of San Francisco, President of the League, delivered the following address:

### Opening Address, Mayor Phelan.

It gives me great pleasure, gentlemen, to call to order the Second Annual Convention of the League of California Municipalities. The progress made by the League during the year has been very satisfactory indeed, as is evidenced by the reports of the Secretary of the Association and of Mr. Lamborn, which you will in due time hear. The Executive Committee appointed by you have given attention to their work. And, as a result of these labors, and especially of the efficient work of Mr. Lamborn, some thirty cities are today enrolled in the membership of the League. A convention of the League was held in Sacramento during the session of the Legislature early in the year, at which there were submitted thirty-eight bills, eleven of which were agreed to. Those eleven bills received the approval of the Legislature and are now statutes of this State, and will, I



believe, work great good to the municipalities affected thereby.

Our energetic Secretary, Mr. Mason, has edited and we now have before us copies of CALIFORNIA MUNICIPALITIES, the official organ of the League. It is a very creditable work, and contains much valuable information in each and every number.

I believe in the future of this League. There is a great work before it. Just what the nature of that work is, we shall have outlined in the addresses that will be made to you. The City of San Francisco has already learned something of the benefit of such an organization through what it has obtained from the National organization of municipalities. Through the adoption of our new charter, we are now measurably independent of the Legislature, and hence the acts of that body do not so directly concern us as they do the smaller municipalities of California. We are about to have an election looking to the issuance of bonds for park improvements, for the erection of a county hospital, for a drainage system, and for the building of new schoolhouses and repairing the old ones. I am in receipt of much valuable information from Boston and some of the other Eastern cities upon the subject, showing the cost and the value to them of their great systems of parks. In this League, the same benefits will be derived from the general dissemination throughout the State of the information obtained by each and every city in the conduct of its municipal affairs.

The question of a park system is one that interests us here very vitally. I believe in parks. I believe that they bring prosperity. I believe in the economic value of the tourist. Moreover, it is a good investment. A conservative estimate of the present value of Golden Gate Park to-day is eleven millions of dollars. Not a great many years ago, it cost the Park Commissioners \$800,000. And look at the en-

hanced value of the property surrounding the park.

There are many questions which interest us all that I would like to address you upon, but you will hear of all these from the other members of the League present, and will receive a great deal of information from the papers that will be read to you and the addresses that will be made. The question of revenue is one that will interest us all. By our new charter we have reduced our municipal revenue by \$100,000 a year in eliminating licenses upon all business conducted at a permanent place and not requiring police protection, that is to say, all business of merchants and tradesmen, exclusive of dance halls and saloons. We ought to be able to make that up by licensing some other class of business. Possibly that could be done by licensing nickle-in-the-slot telephones a dollar a quarter. It may be that our liquor license is low. I know many of our interior cities have much larger liquor licenses.

And so on through a large number of subjects. Questions of that kind will interest every city. In the great city of Paris, which is our exemplar in many things, their budget aggregates fifty-seven million dollars annually, and of that only seven millions is raised by direct taxation. The rest of it comes in percentages from franchises, from lighting and water companies, and from various municipal agencies. That is a remarkable state of affairs, and well worthy our consideration. In San Francisco, which raises a revenue of something like five and a half millions annually, all of it, barring a million and a half, comes from direct taxation.

There is so much of interest, and such a wide range of discussion, that I will content myself with just these few remarks, hoping to profit very much by the discussion which I shall listen to here.

I hope you gentlemen will remain here longer than the convention and

enjoy our hospitality. Our Secretary has arranged for Friday afternoon the latest fad, a trolley ride. I hope you will all attend. Once more bidding you welcome, we will proceed with the business of the convention. (Applause.)

The next in order are the reports of officers of the League. We will first listen to the report of the Secretary.

### Report of Secretary.

To the President and Members of the League of California Municipalities:—As Secretary of the League of California Municipalities I have the honor to submit the following report:

At the conclusion of the Convention, one year ago, whereat this Association was permanently organized, it became my duty to ascertain from the municipalities in the state whether or not it was desired to hold another convention for the purpose of considering measures that should be brought before the Legislature for legislative action.

Accordingly, circulars were mailed to the several municipalities, with the result that a special session of the League was called to meet at Sacramento on February 14, 1899. At this meeting all bills pending before the State Legislature in reference to municipal affairs were examined and a report made to the Legislature and the Governor, giving a list of such bills as received the approval of the League and such other bills as had received our disapproval. Incidentally, it may be remarked that no bill that had received the disapprobation of the League became a law.

At this meeting it was resolved that the executive committee be authorized to establish a schedule of dues for municipalities, graded according to population, which should be paid to the Association in support thereof; also to employ a "Promoter" who would visit the several cities and towns in the state, explain the purposes of the League and solicit their support and membership.

It was, however, not until June that the executive committee found it convenient to meet and carry out the desires of the convention. Shortly before the first of July, the executive committee met and adopted the schedule of dues which has since been published. Mr. B. F. Lamborn's services were engaged to act as Promoter to visit the cities.

At this time the small sum collected at the preceding conventions had been expended for

stationery and printing, and the necessity for funds wherewith to commence business became apparent. However, the executive committee and Secretary, on their personal security, obtained a loan of \$300.

The Secretary was elected treasurer of the executive committee. Owing to the fact that the sum was not large and that certain small expenditures would only be necessary, it was deemed best, for the sake of convenience, to elect me as a sort of de facto Treasurer, without intending to slight or otherwise discredit the real treasurer, who, however, is entitled to the apologies of the committee and myself for our action in the premises.

The work of placing the League on an effective basis, therefore, did not commence until about the first of August. In that month the first number of CALIFORNIA MUNICIPALITIES was published and from that time on, with the publication of the magazine and attending to the work of the League, the Secretary has been reasonably busy.

On September 1, permanent headquarters were secured at Room 14, 8th Floor, Mills Building in this city, where a bureau of information for municipalities has been established and which I trust will, in time, become a very valuable institution.

Since the establishment of this bureau, we have secured a complete list of cities and city officials in the state, the first that was ever compiled. It required a period of three months to get this information.

Within the brief time that this Bureau has been established, it has been called upon to give information on many subjects, such as disposal of sewage, specifications for street pavements, data on electric lighting of cities, right of cities to appoint library trustees, reincorporation of cities, etc. It will require time, however, to bring this department to its highest plane of usefulness. While we cannot guarantee to answer all questions, will do the best we can.

Since the first of September the following cities have paid the annual fee required and thus are active members of the Association: Santa Clara, Sonoma, Red Bluff, Merced, Modesto, Petaluma, Santa Rosa, Stockton, Berkeley, Pleasanton, Paso Robles, Bakersfield, Los Gatos, Watsonville, Livermore, Salinas, Redwood City, San Bernardino, San Leandro.

In addition, the following cities have joined the League; but the dues have not yet been received by this office: San Francisco, Oakland, Alameda, Healdsburg, Redding, San Mateo,



Palo Alto, San Jose, Santa Cruz, Redlands, San Diego.

Furthermore, I have reason to believe that many more cities have taken the necessary steps, but have not reported their action.

As a matter of fact, with very few exceptions, municipal officers concede that this organization is a good thing and deserves support. We may safely count upon nearly every city in the state becoming a member of the League within the next three months.

The following is a report of the receipts and expenditures of the League during the past year:

#### RECEIPTS.

Cash at December Convention .....	\$ 17 00
“ “ February “ .....	14 00
Loan made by Executive Committee ..	300 00
Santa Clara dues .....	20 00
Sonoma “ .....	20 00
Red Bluff “ .....	20 00
Santa Rosa “ .....	20 00
Merced “ .....	20 00
Modesto “ .....	20 00
Petaluma “ .....	30 00
Stockton “ .....	30 00
Berkeley “ .....	30 00
Pleasanton “ .....	20 00
Paso Robles “ .....	20 00
Bakersfield “ .....	30 00
Los Gatos “ .....	20 00
Watsonville “ .....	20 00
Livermore “ .....	20 00
Salinas “ .....	30 00
Redwood “ .....	20 00
San B'd'no “ .....	30 00
San Leandro “ .....	20 00
Total .....	\$771 00

#### EXPENDITURES.

Paid B. F. Lamborn, account .....	\$316 90
“ Furniture .....	41 05
“ “ .....	5 00
“ Rent, 4 months .....	80 00
“ expenses Secretary's office .....	128 55
“ collections on city warrants .....	1 15
Balance cash on hand .....	198 35
	<hr/>
	\$771 00

#### RESOURCES AND LIABILITIES.

RESOURCES—	
Due from cities .....	\$330 00
Cash on hand .....	198 35
	<hr/>
	\$528 35

#### LIABILITIES—

Due on Hutchinson note .....	\$310 00
“ “ Lamborn acct .....	32 00
“ “ Typewriter .....	35 00
“ “ Account of convention .....	100 00
Balance .....	51 35
	<hr/>
	\$528 35

The report was, upon motion, duly seconded, received and accepted, with the thanks of the Convention.

MAYOR PHELAN—The next order of business is the report of the organizer of the League, Mr. B. F. Lamborn, City Clerk of Alameda.

#### Report of B. F. Lamborn.

Mr. President and Gentlemen of the convention:—After the last convention of this League, the Executive Committee at once set to work to devise means for raising the necessary funds to run it. This was done by fixing upon a sum to be paid by each municipality, ranging from \$20 to \$60, according to its class. There are 110 organized municipalities in the state of California. From our letters sent to them, we received eight or ten subscriptions. It then became apparent that someone would have to go and see the rest of them and see why they had refrained from answering our inquiries. Being a little bit out of health, and desiring to quit the exacting duties of the city of Alameda, I undertook the work of promotion or organization. I found in my rounds that a great many erroneous ideas had been conceived of us. A great many of the cities thought it a political proposition, and it took a great deal of hard work to really get it through their heads what our objects and purposes were. I have visited sixty-four cities and talked to sixty-four Boards of Trustees, City Clerks and City Attorneys of the state of California within the last ninety days, and I have found that after they realized what it meant to have such an organization, they became enthusiastic. When I had told them what a fund of information

could be obtained through the League, how reliable it would be, and showed them the power for good of such an organization, they have without exception evinced a desire to join us. And I now say that every city in the state of California that I have visited is ready and willing to come and will come into this League; not one is holding out. And when the work is done completely, I believe we shall have with us every municipality in the state of California. (Applause.)

MAYOR PHELAN—If there is no objection, the report will be received. Hearing none, it is so ordered.

We have next upon our program for this afternoon the subject, "The Future Work of the League," upon which we hope to listen to some interesting papers and discussion. I will first call upon Mayor Snow of Oakland.

#### **Mayor Snow of Oakland.**

I am asked to say something about the future work of the league. It appears in the advertised program that four speakers are to follow upon this subject, and any attempt on my part to be exhaustive would therefore be out of place. I have it in mind to speak briefly with reference to only one or two possible direct benefits of the league: First, to the municipal officers in this State, and, second, to the citizen. I will not stop to speak of the birth of the league; of its first work nor of the work of the year just closed. Of this you have been informed by the officers, to whose reports you have listened. The league is but young. It has done something already. But these are hustling days and men are critical. No league, no association is judged by what it has done, but by what it is doing.

I say that man was made to grow, not stop; That help, he needed once and needs no more, Having grown but an inch by, is withdrawn; For he hath new needs, and new helps to these.

—Browning.

And what prophets and poets have

truly seen, time and these have lifted us up to see.

There is need of the league. The municipal officers of the State need it. I do not know how it is in every case, but to be an officer in many cities is to have honor mixed with opprobrium. The loud election-day acclaim is soon changed to looks of vexation and surprise. Stalwart advocates of reform, but with an eye to the main chance, are often disappointed and soon augment the ranks of the political opposition, wishing for and prophesying the early downfall of the administration. There is strength and satisfaction in the consciousness of duty done, but the municipal officer needs more uplift than this to counterbalance the downpull of the jealous and disappointed. He needs the strength that comes to every man by contact with men of like purposes. He needs their support. He needs to know what they know.

The problem of city government is confined to no single city. The experience of each and every municipality in our own State is of especial interest to us all as municipal officers. Samuel Johnson said: "Knowledge is of two kinds. We know a subject ourselves or we know where we can find information upon it." Few of us, if any, have been trained in the work which we have been chosen to perform. We actually know but little about it. Where shall we get reliable information upon it? You know that it is not uncommon to receive a return postal card from some sister city setting forth the fact that the inquirer finds himself ignorant, and almost pathetically begging you, with 300 or 400 others, to tell him upon a postal card, half as big as your hand, what you know. I have never tried this, but it must be pitifully slow and unsatisfactory. To get even a passable idea of city government during one's usually short term of office is next to impossible. There is need of a clearing-house of information; a place of exchange. There may be a storehouse of



book and pamphlet under the same roof for reply to a letter and urgent telegram of inquiry.

If every city in the United States, except ten, having a population of over 30,000, has concluded, as they have for the present, that the best method of controlling the drink habit is to license saloons and surround them with police protection, this is important information for both crank and sot in every city. It is important to learn from statistics of other cities as well as from the persuasive tongue of the fire insurance agent whether or not our property is properly protected by expensive municipal fire apparatus. In matters of public health the taxpayer needs only to compare the death rate of his own city with one more healthy to open his purse for sewers and the more modern disposition of refuse. In the pavement of streets, clamorous contractors make no mention of other and perhaps better pavements than their own. Cobblestones, granite blocks, bricks, wooden blocks, asphalt, bitumen, macadam, gravel and every experiment under the sun has been tried in other cities like our own, and the citizen and officeholder should know with what result.

In the sight of brave municipal undertakings the weakest city, with spirit now broken by private corporate domination, may rise again to possess in its own name and to manage solely for the public good water works, gas and electric plants and street car lines. Hospitals, almshouses and orphan asylums have come to be maintained by many municipalities as a matter of course, while other cities of even greater size have none of these and need the stimulus of example to undertake them.

The air is truly rife with all manner of municipal projects. The citizen, as well as the municipal officer, needs, in the face of the many discouraging American municipal limitations, to know of every municipal success whenever and wherever it is accomplished. And then, the wisest and most poten-

tial enthusiasm waits to compare the conditions of every successful municipal undertaking with its own city.

The Committee on Municipal Administration in the city of New York has made the whole body of literature on the general subject of municipal administration and city conditions easy of access by the preparation and publication of their bibliography. This work contains over 6000 entries. The names of authors are given, the titles of works of each and a vast amount of information concerning municipal affairs is so well arranged that scarcely any civic problem can be raised that is not referred to. Is it not the proper work of this League of Municipalities to bring every city officer within the State of California face to face with the knowledge and experience of every other city—to put the record in his hands if he will?

The citizen is king. Long live the king! The city is his. It will always be what he chooses to make it. The citizen is the future municipal officer—next year, or soon after, he will take his place. He will make or mar. He is confessedly too busy to dig for the information that will equip him for his important task. This information should be furnished him in the most potent form adapted to the busy man, Who shall do this but the league? The State, by the appointment of a Municipal Board, may prescribe methods of keeping accounts, make reports and might even go so far as to make suggestions to cities: But there is an increasing disposition to withdraw our city affairs from the control of the State. We like to frame and pass our own laws. The average citizen believes that he knows what his city needs better than any State Legislature, no matter how intelligent they may be. He believes that each city should care for its own affairs. With this growing disposition to constitute a political unit, which is yet hardly recognized by the State, the growth of the average citizen in the knowledge of municipal affairs

is of the most pressing importance. It cannot be safely delayed. Can the league come in touch with every urban dweller of California, by book and pamphlet, original or reprinted, by local conferences, by competent utterance through the press of the State?

Less knowledge of municipal affairs than we as officers possess would make pessimists of us all. Public opinion is so slow to be won; misunderstanding of the real intent of municipal legislation is so common, it is of the greatest importance that the citizen be informed of the successful efforts in other cities before he actually gives up to pessimistic despair for his own. The successful cleaning of the streets of New York encouraged San Francisco to make the trial. Succeeding, San Francisco has not only cleaned her own streets, but encouraged every urban dweller in the State of California.

I knew a city not a hundred miles away that needs a park. Passing by one of the most beautiful pieces of work that nature ever did, and this, too, in the very midst of the city—contrary to the example of every other city in Christendom, the unwise and misinformed promoter of the public welfare in that city would overlook the beautiful lake; its borders of graceful willows, its acres of venerable oaks studding the rich adjacent upland to advocate a vast park site, miles away, because, forsooth, San Francisco has made, by sheer pluck, an Eden on the shore of the Pacific. Ignorant they seem to be of the fact that Golden Gate Park has been possible to San Francisco because this city has an assessment roll of \$300,000,000 upon which to levy a park improvement tax, while their own property valuation does not exceed for assessment purposes \$45,000,000, and is not likely to increase until they embrace the rich opportunities now scorned.

In this same city a business association is applying for the right to collect and burn the garbage of the city—the

sole right for twenty-five years. An argument made by the attorney for the association is that the great city of San Francisco has granted such a franchise. The Councilmen of the city are perplexed. Tabulated information concerning private and municipal crematories would be invaluable just now. San Francisco may have made a mistake. Will men profit by the mistakes of others? Such a tabulation would cost little labor and printer's ink. A pamphlet setting forth the experience of other cities and sent through the league to leaders of public opinion in Oakland would put that city right on that question.

Public officers have great respect for the opinions of thoughtful and intelligent citizens. The citizen has come to know this. Thoughtful men realize also the danger to our urban life if permitted to develop further without intelligent plans. These are on the lookout for authentic information. These need the league, and to its help the number will so increase that city government in this State will no longer be permitted to stumble towards correct methods through costly and distressing experiences.

We will now listen to some remarks upon the subject by Mayor Hutchinson, of Palo Alto.

#### **Mayor Hutchinson, of Palo Alto.**

Mr. President and Gentlemen of the Convention:—I must say that I feel a little bit ridiculous to be announced on this programme as the Mayor of Palo Alto. We have a little town of the sixth class, and have only a Chairman of the Board of Trustees, and, fortunately or unfortunately for myself or the town, I occupy that position.

I cannot go on with my remarks without first congratulating the League upon its growth during the past year. It was only a handful of us that met in this same room a year ago and organized the League. Part of the time the



atmosphere was a little blue, particularly when the amount of money that went into the Treasurer's hands was counted up. Still, we had a good time.

There is a curious thing that I have just noticed about this program, and it illustrates the purpose of the League. If you will look at the program, you will observe that the names of those who are to speak upon the topic of the afternoon are printed in such shape that they look like the flying wedge in football. That is exactly what this League is for—to cultivate a system of team work. We shall work together with an energy and a push that is irresistible.

We all know how a town grows. I have been in Palo Alto since it was a mere field of waving grain. I have seen it grow until it is now a town of 2500 people. This growth is very interesting. First, we have a little scattering village, and people come, and we form a little improvement club, and then we find we have to have more power, and in the due course of time comes the incorporation of the city, in order to enable us to do the more effectively the work that is necessary.

That, I believe, illustrates the growth of this organization. We were very small a year ago; we did not know where we were to turn for means. But now, even in this short time, we have an assured income of \$2000 a year, and I think another year will see the organization risen to the power of the city. I think that wonderful progress has been made.

Turning from these more general remarks to the immediate future of the League and the work we must do, I desire to say something with reference to the by-laws of the League, because the whole organization is based upon the by-laws. They are the frame-work of the structure, and what we accomplish must depend upon them. It has become necessary already that they should be changed considerably. I do not want to enter into tiresome details, but I desire to indicate two or three di-

rections in which they must be altered.

As to the Treasurer, it happens that that official for the last year has lived in Berkeley. A San Francisco bank ought to be made the League's Treasurer. The next provision is that in the by-laws that all officers shall serve without compensation. As Mr. Britton told us a year ago, speaking from his experience in the Merchant's Association, we must have a compensated secretary and promoter—possibly two officials, and possibly one can do both classes of work. Another matter is that of the selection of a place for annual meetings. We consider that, instead of left with the executive committee, that should be left to the convention at each annual session. Then Article 10, which provides for a charge of \$1 per annum from delegates must be stricken out, and the schedule of fees adopted by the executive committee to be collected from the various municipalities, or some schedule of fees, should be inserted instead. That schedule was adopted under authority of the convention of the League held in Sacramento last January. Then we should organize a Legal Committee, so to speak, to prepare legislation and look into the question of proposed legislation.

At this point I will indicate a few matters of great importance which, it seems to me, must come before the League at this convention, as to which we must go on during the next year and prepare for the next session of the Legislature. The subject which has been perhaps most prominently brought out in the various discussions which our promoter has had in different parts of the state, and which is shown also by the correspondence, is the necessity of a new street act. Every town seems to feel the inadequacy of the Vrooman Act. So there should be a new street act, and it should be drawn very carefully. A committee of lawyers should be appointed by this convention to draft such an act and to submit it to the next convention which meets in Decem-

ber of 1900, so that it may be in crystallized and proper shape to submit to the Legislature of 1901. If we can accomplish that one thing alone, we shall have done a very great thing.

Another matter is the matter of municipal accounts. We all know that municipal accounts are not kept at the present time in proper shape. I think Mayor Snow keeps his accounts in Oakland correctly; but I think he is the only one who can say that. Those in the small towns and counties are kept in very poor shape, and such important questions as: What is the expense of a public water works as segregated from the expense of a lighting plant? Where the two are in operation, this cannot usually be answered. It is important to determine, for instance, whether the lighting plant has paid. The water plant may be carrying the lighting plant, or vice versa, and yet you cannot tell from the accounts as they are kept anything about it. Under a proper system of bookkeeping—and that system should be a uniform one throughout the state—all such detailed information could be obtained.

So in regard to the matter of taxation. The tittle town of Palo Alto (and I suppose it is also in all the other towns of the state) has a period every year of absolute bankruptcy between the beginning of the fiscal year and the time when the taxes come in. There should be some scheme devised to obviate that.

In closing, in order to make effective what I have said, I will now, Mr. Chairman, move that the Chair appoint a committee of three to draft amendments to the by-laws and propose them for the action of the convention on the last day of the session.

The motion carried unanimously, and the Chair appointed Mayor Hutchinson of Palo Alto, City Attorney Kirkbride of San Mateo, and H. A. Mason as such committee.

MAYOR PHELAN—The committee will report at the last session of the conven-

tion, if there is no objection. You suggest a committee on legislation, so that a uniform system of accounts may be devised and certain legislation drawn. Will that be provided for in the by-laws?

MAYOR HUTCHINSON—Yes.

MAYOR PHELAN—I think before we proceed to a general discussion of the matters that have already been brought out, we had better listen to all those who are on the program to speak. I suggest that the delegates make notes as things occur to them during the reading of the papers or delivery of the addresses, so that they may not forget such questions as may occur to them.

MAYOR PHELAN—The next gentleman on the program is Mayor Eaton of Los Angeles. It gives me great pleasure at this time to introduce him to you.

### Mayor Eaton of Los Angeles.

Mr. President and Gentlemen:—That you may know how far away we are from my town of Los Angeles, I will tell you that I knew nothing of this organization until a few weeks ago when Mr. Lamborn came down and visited us and asked us to join the League. He gave me some little idea of the business of the organization, but I could not quite fully understand it, and so I thought I would come here to learn what your purposes were. If I had known what I have learned in the last hour, I would certainly have prepared a paper setting forth some things that I think this organization should take up. One of those matters has been mentioned by the speaker who has just preceded me, the Vrooman Act. I think all the cities in the state will agree that that Act is a very cumbersome one under which to do street work. I have had some experience with it as the City Engineer of Los Angeles, and with very unsatisfactory results. Moreover, I have heard it very much complained of in every city of the state where I have heard it mentioned.

The objectionable feature of the



Vrooman Act is that it is too technical. We are constantly in litigation to find out what it means. One very serious defect is the fact that under it the City Street Superintendent has charge of construction work, the City Engineer having only the designing of street work, and not having anything to do with carrying out the work, which is fully as important, really more important than the design, because it is easy enough to simply get a stereotyped plan of work, whilst the execution of the work to get the best results and carry out what the plans contemplate needs technically skilled men.

In Los Angeles when I was City Engineer, we operated for a time under our new charter, and we worked after the methods employed in eastern cities for carrying on such work, our law being a very plain and simple one. Though we were doing the work illegally and should have been working under the Vrooman Act, we worked along under the charter law for a year, not knowing that we were wrong, and built two and a half miles of pavement, the first pavement that was built in the city, and eight or nine miles of streets, as also quite a number of sewers. Everything went smoothly. We got the very best prices for the work, the best bids, and had no difficulty whatever. But then our City Attorney told us we had to work under the Vrooman Act, and the expense at once increased on all grading and sewer work from 50 per cent to 100 per cent, and there was constant litigation by the abutting property owners, and irregularities in the proceedings, so we were constantly in a broil. It was very unsatisfactory, and it took a couple of years before the officials learned how to really interpret it and know how to do work under it without making these blunders. And yet you find suits pending all the time, contesting some part of the Vrooman Act. That makes it very expensive for the man who has to pay for the work.

When it is done under the Bond Act,

the security is discredited, and the risk which the contractor takes in collecting his money is such that he adds quite a percentage to the profits of the work. Then, too, he has to sell the bonds at 75 or 80 cents on the dollar, and of course he adds that depreciation in making his bid. The interest is high compared with what it would be and what it is on general improvement bonds. If the Eastern methods of doing the work under the bond system were used, it would result in giving us a low rate of interest on the bonds. However, I think that we cannot, under our Constitution, issue special improvement bonds; it would probably require an amendment to the Constitution to do that. If found desirable by this League after discussing the matter, there is a good piece of work for it.

There is another thing that has been called to my special notice recently from some difficulty we have had in Los Angeles, and that is the matter of police pensions. There is a police pension law here in operation which I believe should be repealed. I do not know whether San Francisco and the other cities which are represented here have gone under that law, but with us it is obligatory on the Commissioners to give all officers a pension after they have served a certain length of time, and after they have reached a certain age. I believe that the Police Pension Act makes the position of police officers too desirable. I have observed that the men who are most anxious to get on the police force are men who know a soft thing, and this Act makes the position exceptionally soft. The consequence is that we do not get the very best of men. I believe the law had the opposite effect from that intended. If the Act was enacted by men who were interested in better government, their object no doubt was to get a higher grade of men on the force. If it was enacted through the influence of the police of the state, the intention was, of course, to better their condition. In

either event, I do not think it works to the interests of city or state, and I think the law should be repealed. It is a burden that I do not think the people should stand. It is special legislation. If you are going to pension police officers, why not pension all officers? Why single out policemen? I do not think his position subjects him to any great danger. In fact, his uniform is a protection to him. It is very rarely that you hear of a policeman being killed—at least down our way.

Returning to the Vrooman Act, it is one that is very important. I am sorry that I did not fully appreciate the object and scope of this League before coming here, as I should much have liked to prepare a paper in detail upon the subject, showing a lot of defects in it and necessities for their remedy. To get up an Act that will overcome these defects means a lot of work. You will have to have some able man to work on it and to compile a new act or properly amend the old one. As between the two, I think it would be the better plan to simply repeal the Vrooman Act and adopt in place of it some plain, simple provision such as we had in our charter. However, that is a matter of detail that will require a good deal of thought and that must be entrusted to a committee of attorneys who have had experience in municipal affairs.

The laws upon the subject of fixing grades might be modified to advantage, too. They are too complicated now. We have got a little street that we have been trying to open for a year or two, and there is some technicality that prevents us from doing it. That subject should be looked into.

Another thing that I think should engage the attention of the League is the granting of railroad franchises in cities. There are some companies down our way who have been trying to get a railroad franchise, and it is very desirable that it should be granted to them. It opens up a new territory. But there is some defect about the law. I do not

think it desirable to make laws that will discourage capital from investing in our cities. We are a new section of the country, and we want rather to encourage capital. I do not fully understand what the difficulty is with the companies down there, but it has to do with extensions. I think they require a payment of a certain percentage of the gross earnings to the city. When you come to make an extension, you cannot arrive at what the proportion for the extension will be. What should apply to new roads should not necessarily apply to extensions.

In conclusion, Mr. Chairman, I want to say that I am very glad that I came here. We have been isolated in a measure down in our section of the state, and had to take care of ourselves. You know there was at one time a great deal of talk down there of State division, and it caused quite a bit of feeling between the North and the South. I will say that there never was any disposition among the natives of the South, the people who had lived there for years, to make this division. It was confined to people who came there more recently and saw the necessity for the state doing a great many things that had not been done, such as giving us State prisons and insane asylums, and other things we could not have, and all the appropriations were at that time going to the northern part of the state. However, since it has been conceded that we are a part of the state, and we have been given the recognition that is due us, that feeling has entirely disappeared, and it is very rarely now that you will hear anyone talk of State division. (Applause.)

MAYOR PHELAN—We have upon the program Mayor Capps of San Diego, who regrets that he cannot be present. It is now entirely with the Convention as to whether we shall read or merely have printed the paper of Mayor Brooks of Marysville. I understand that it is a very interesting paper.

The paper was, upon motion, read,



### Mayor Brooks of Marysville.

At the very outset of any consideration of "The Future Work of the League" we are confronted with the question of "Ways and Means." As in all the other activities of life, the amount of work we can accomplish, and the nature of it, are largely shaped and determined by the means at hand. No argument ought to be necessary to justify the existence of the League. The bare statement of its purposes ought to make its advantages apparent to any one at all interested in municipal affairs.

The meeting in convention of representatives from different municipalities, each with its own peculiar institutions, fitted to the local conditions prevailing at each place, cannot fail to result in an exchange of ideas and methods mutually beneficial to all, and in giving each city an opportunity to adopt for itself, the very best practices prevailing elsewhere. We expect our annual meetings to be largely "experience meetings" and doubt not that every member in returning to his home will carry with him more new ideas about good municipal government than he ever dreamed of before.

Pleasant as are our annual gatherings, much as we enjoy renewing old acquaintances and coming face to face with other trustees of the public welfare, we can do much good in other ways. I do not mean to disparage the work of our meetings. On the contrary, it is to be commended. But there is much additional work that can not be done at meetings.

The establishment of a permanent bureau, with a salaried secretary, to collect, record, classify and distribute information about what all our cities are doing, and about the thousand and one things on which city officials are constantly in search of information, would prove a great factor in improving public service. How many times each of us has wondered what neigh-

boring cities were doing on certain propositions, what salaries their officers, or school teachers drew, what ordinances they adopted, and many other matters, of more or less importance, and yet we dreaded the labor involved in getting the information. How much simpler it would be to write to our Secretary for the required information and have his reply at once, giving the information desired, compiled from reports on file in his office, which reports it would be his duty to collect at frequent intervals. In this way cities would be brought into closer touch with each other, and would work along uniform lines more than they now do. But such a bureau is a matter of expense, and desirable as it would be, must be put off until the League is in receipt of a regular, steady income. City officials are necessarily, as a rule, loth to offend the tax payers, and as the latter are usually unwilling to permit any expenditure in which no direct return can be seen, it may be some time before the several cities constituting the League, will be contributing regularly to its treasury. Under such circumstances it may be too much to expect the very early establishment of such a bureau of information as I have referred to. A campaign of education is necessary to let the public become familiar with our work and its value. Once understood, popular approval can not long be withheld. Happily the very excellent publication, "CALIFORNIA MUNICIPALITIES", conducted by our Secretary and Mr. Lam-born, is doing good work along this line. Many officials and employees of interior cities and towns who perhaps never before heard of the League, now appreciate the information about other cities that they find in the columns of that publication, and they realize the value of the interchange of ideas and methods to the movement for more improved and uniform municipal government.

If the want of funds prevents our doing all we would, I think much good

work for the future of our League can be done by volunteer efforts, through the appointment of special committees to conduct investigations during the year along lines deemed most important, to report at our next convention, or by publication of their investigations from time to time, in the columns of CALIFORNIA MUNICIPALITIES as may be thought best.

Suppose we had a special committee on "Street Paving Laws," another on "Sewage Disposal," another on "Uniform Municipal Accounts." It can readily be seen that alert committees, industriously gathering in all the information that they could get on either of these subjects, having ample time to send any distance for information and also to sift the good from the bad, would be able to collect much valuable material, and at the end of the year, if not before, could formulate their recommendations with the certainty of endorsement, and with the knowledge that they had selected the very best plans that could be obtained.

I do not know that a committee on uniform municipal accounts could add much to Mayor Snow's very valuable work along that line, but they might at least put the wheels in motion for the adoption of his plan, with such slight modifications as might be thought necessary, by the various cities of California.

The decisions of the courts during the past year, hostile to the "Vrooman Act", under which law many cities have made rapid and extensive improvements in their streets, which decisions make the law practically worthless by destroying the confidence of the people and especially of contractors in it, emphasize the importance of amending this law, or substituting some other for it. An earnest enthusiastic committee could weed out the objections to the old law, simplify it wherever possible and present a measure that would not only commend itself to the League but to Legislators as well.

"Sewage Disposal" is a subject of vital importance to the health and convenience of cities, and one on which too much study cannot be given. Methods as well as cost, are factors in any settlement of question, and there is a large field for investigation by an industrious, interested committee.

Hundreds of suitable subjects might be suggested any one of which would be well worth all the labor a committee could give it. "Quarantine Regulations," "Municipal Ownership of Public Utilities," "Water Rates," "Lighting Rates," "Franchise for Private Corporations engaged in handling public utilities," "Legislative powers of Cities," "Uniform Charters," "Court Decisions affecting Cities," "Centralization of Power in the hands of Municipal Executives," "Uniform license regulations," and many other subjects need only to be mentioned to suggest what work proper committees could do with them.

Through these special committees we would accomplish division of labor, subjects being assigned to those specially interested in handling them. If arrangements could be made for frequent publication of the committee proceedings, data collected, etc. the public would be kept interested in our work, and a larger number of people would be reached through the publications than would ever attend one of our conventions. I think a few columns of "California Municipalities" should be secured for the use of the League, in which we would be at liberty to make announcements, publish proceedings and bulletins of committees, correspondence, etc.

Through these special committees the League could be said to be in action all the time, prepared for work at all times.

If the committee method is deemed impracticable, I think a volunteer correspondent should be secured in every City, who would keep the Secretary or executive committee informed of every item of general interest to Municipal



Authorities that came to his notice. In this way, much novel and interesting matter would be reported and put into operation elsewhere.

We should not work for the newest idea always, because a new thing is not always an improvement, but strive always for the best, working earnestly, enthusiastically and unselfishly, I believe our League can do much for better municipal government and become a power whose judgment on matters concerning cities will be respected and followed by those in charge of municipal legislation.

### General Discussion.

MAYOR PHELAN—You have now heard, gentlemen, such addresses and papers as have been prepared for you upon the subject of The Future Work of the League. It is now in order to discuss the subject generally.

Before proceeding to that, I will mention something that I intended to note in my introductory remarks, and that is that next November at the general election, there will be a constitutional amendment submitted to the people exempting municipal bonds from taxation. That is a very important proposition. Many of our cities contemplating improvements find that they will have to go into a bond issue for refunding their indebtedness. The Merchants' Association of San Francisco petitioned the Legislature at the last session, and the Legislature has passed for submission to the people an amendment upon this subject. It is illogical and unproductive of revenue for city or State to tax its own securities, and the only result has been to force such securities outside of California. Our savings banks cannot hold them, because they cannot afford to hold them and pay taxes. Nor can our citizens hold them, unless they hide them from the Assessor. With our securities in other States, the only effect is to send the interest to other States. So there is every reason for

the adoption of the amendment, and I think this League should commit itself to that policy before its adjournment, as the amendment will be submitted to the voters of the State before we meet again in convention.

If any gentleman has anything to say pertinent to the future work of the League, or anything that has been suggested by the papers, we shall now be very glad to hear from him. I see Mr. Byington has just come in. He is at present a member of the Board of Supervisors of San Francisco, as you are aware, and our District Attorney elect. Mr. Byington has recently proposed a measure relating to the reduction of street car fares in San Francisco. At the same time the Attorney-General of the State has taken an appeal to the Supreme Court from the decision of the Superior Court of San Francisco which denied the Railroad Commissioners of the State the right to interfere in regulating street car fares. It is an interesting question and a live one. I am sure the convention would like to hear a few words from Mr. Byington at this time.

SUPERVISOR BYINGTON—Mr President and Gentlemen of the Convention: While not prepared to participate in the discussion which I presume would take place this afternoon, I do not know of anything that is more likely to interest you than the matter of street car fares, and so I will say a few words to you upon that question. I am certainly of the opinion that under the Consolidation Act of this city, we have the right to regulate street car fares. Under the Act of 1863, there was specifically ceded to the Board of Supervisors the power to regulate charges upon cabs, hackney coaches, and other public conveyances carrying passengers or freight. A street car is certainly a public conveyance carrying passengers. This subject was first brought to my attention by the figures presented by Assessor Dodge at the time we were equalizing taxes upon the various cor-

porations and street railways here in San Francisco. He showed by figures that the street car lines in San Francisco were treated better than they are in any of the other large cities of the United States. That is to say, in a great many of the Eastern cities they pay a certain percentage of their gross receipts into the treasuries of the municipalities. In the City of Baltimore, I believe this percentage maintains its public park; in the City of Toronto, in Canada, they not alone provide cheaper fares than are now provided for in the schedule I presented the other day, but they also collect a minimum of eight per cent on the gross returns of the street railroad companies.

The ordinance which I introduced before the Board of Supervisors last Monday is a very modest affair. It merely provides for a reduction of fares to the extent of granting seven tickets for 25 cents, the benefits of which are to go to the laboring men of the municipality, since they are to be used only between the hours of six o'clock and eight o'clock A. M. and five o'clock and seven o'clock P. M. It also grants a lower rate to school children. In the latter respect, I believe a great many other municipalities already have a similar regulation. I think education should be brought as near as possible to the homes of the poorer class of our citizens. I know that where a person has a great many children, and lives some distance from the school house, it would make a very material difference. I introduced this order with the very best intention in the world, and I believe it could be passed by the Board of Supervisors, although I have observed that reform measures, as a rule, do not go very far when they strike a San Francisco Board of Supervisors. I must say, however, that there certainly is very great reason for hope that we will have general reform under our new charter. But during the time that I have been a Supervisor of this municipality, I have hesitated about intro-

ducing in the Board any measure that would redound to the general welfare of the people of the municipality, because I knew it would be a useless thing—that it would meet with defeat. The power certainly resides in the hands of the Mayor of this municipality under the new charter to block all legislation which will be to the detriment of the city, and I believe that under the new Board, reforms will be inaugurated, and that we are about to enter upon a new era in San Francisco.

I want to say to you, gentlemen, that there is nothing that I myself am more deeply interested in at this time than the success of your organization. I think the State of California has been behind most of her sister States of the country in regard to municipal reform. It is about time the Mayors and executive officers of the cities of our State got together and did something. I am glad that you have entered upon the work, and I feel certain that great good will come through your body and its annual conventions. (Applause.)

MAYOR PHELAN—I understand, in connection with Mr. Byington's remarks, that the street roads of Los Angeles voluntarily made a lower rate than the ordinary one to school children. How is that, Mayor Eaton?

MAYOR EATON—That is incorrect. Those rates were made for school children at the time the franchises were granted to the companies.

MAYOR PHELAN—Is it seven tickets for 25 cents with you there also?

MAYOR EATON—No. It is half rate for children under eighteen years of age.

MAYOR PHELAN—To be paid for in tickets, I presume?

MAYOR EATON—Yes, in tickets. They have to buy a dollar's worth of tickets at a time.

MAYOR PHELAN—You have not coppers in Los Angeles, have you?

MAYOR EATON—Yes, we have copper cents there. The way it happened that we got this provision incorporated



into the franchises of all the street railroads in Los Angeles was this: Some San Francisco parties came down and wanted to build a cable road. They got their franchise and in it was incorporated that provision. The Los Angeles railroad people, who already had some horse car lines there, purchased this franchise. In order to issue bonds to build over all the lines, they had to get an extension of the old franchise, as otherwise their bonds would not be taken. Applying to their old franchise renewed, it was granted with this provision included. We forced them to agree to carry school children for two and a half cents in that way.

MAYOR PHELAN—That includes all school children, does it?

MAYOR EATON—Yes.

MAYOR PHELAN—Is there a reduced rate for workingmen also?

MAYOR EATON—No, just for school children.

MR. BYINGTON—I would like to ask whether the general result has been beneficial or otherwise there. That is, do you think the railroad company loses anything by the lower rates? Has not the traffic been increased enough to make up for it?

MAYOR EATON—I do not know about that. Most of the school children, when they get home, stay there, and when they go to school in the morning, they stay there. If it were a reduced rate to the general public, I am sure the traffic would be much larger. But I do not think it applies to school children.

MAYOR PHELAN—Do they go home to lunch at the lunch hour more than they did before?

MAYOR EATON—No. Very few of them go home to lunch there. You know we are a city of magnificent distances down there, and it takes quite a while to get from home to the school house.

MAYOR PHELAN—Does it increase the attendance at school?

MAYOR EATON—It certainly does.

There is no doubt that it is a measure for the public interest.

MAYOR PHELAN—Then if you did not have the rates half fare for children, it would simply double their expenses in going to and coming from school?

MAYOR EATON—This applies more particularly to high school children. It does not ordinarily apply to the lower schools, because they are located near the children. We are pretty well provided with these schools, which are well scattered over the city. But it no doubt increases the attendance at the High School, because that is centrally located for the whole city.

MAYOR PHELAN—Does any member of the convention desire to ask any question pertinent to the subject under consideration?

CITY ATTORNEY KIRKBRIDE.—Mr. President, I would ask Mayor Snow whether he has any idea with reference to legislation along the line of municipal accounting. He suggested that that be a matter for the consideration of the League. Possibly he may have an idea that legislation is desirable along that line.

MAYOR SNOW—I assume, Mr. Chairman, that the help of the Legislature is necessary. An act of the Legislature is essential, in order to secure a general method of accounting, uniform throughout the State. I think a statement from Mr. Lamborn might be of greater value than any statement I might make in that respect. Except to answer questions, I have not been in touch with the other cities of the State of California upon the subject. I have answered a great many questions, but never inquired particularly myself. I presume that, as Mr. Carrol D. Wright, our Labor Commissioner at Washington, has said, it is very difficult indeed to obtain information that is reliable and available or valuable along these lines, because the information is so difficult of arrangement after one receives it. I am not at this moment pre-

pared to give just the number of States that permit by the Act of the Legislature the appointment of commissions. I think as far back as 1886, there was a commission appointed for this purpose in the State of New York, and I think that the Bureau of Statistics recently organized in Boston is perhaps an outgrowth of suggestion made outside of Boston as well as in it, and if it is not the result of an Act of the Legislature of the State of Massachusetts, there will eventually be such an Act, so that all the cities in that State will keep their accounts and records in the same manner that Boston is now arranging to keep them. We should do the same thing here.

The suggestion has been made that I am still keeping the books in Oakland, but I am not. The accounts are now kept in a most admirable manner by our present City Auditor, Mr. Breed. Anything that Oakland has done in the last few years along this line, she has been indebted for to the University of the State of Wisconsin, and to two or three prominent gentlemen in Germany whose names you would perhaps not recognize if I should pronounce them. Very much valuable information has been obtained which the cities of California, every one of them, need, and they should utilize it. Mr. Lam-born and Mr. Mason must testify that very much of the information that they receive as to accounts, whether it is by postal card or from printed report, cannot be utilized. I think the Legislature of the State could be called upon in the matter. I think it would be necessary to call upon it to assist in giving us a uniform method of keeping books and records.

The convention thereupon took a recess until the evening session.

NOTE—At the evening session David Starr Jordan, President of Leland Stanford, Jr., University delivered an address on the subject "A Continuing City." This address will be published

in the February number of this magazine.

THURSDAY, DEC. 14, 1899, 10 A. M.

The convention was called to order by First Vice-President J. W. Richards, of Berkeley.

MR. RICHARDS—The subject for this morning is "Street Improvement Acts." The first gentleman on the program, Mr. F. K. Lane, of San Francisco, is not present. We will therefore listen to the paper by W. A. Beasley, City Attorney of San Jose.

### **Apportionment of Taxation for Street Improvement Purposes.**

Since the decision on December 30th, 1898, of the case of the City Improvement Company vs. William Babcock by the Supreme Court of the State of California, by which the owners of the majority of the frontage of property on streets which City Councils propose to improve under the Street Improvement Act of March 18, 1885—the Vrooman Act,—were given practically an absolute veto upon such street work, little if any work of street improvement has been done in the State of California. For some reason the Legislature of 1899 failed to amend the Vrooman Act and also failed to pass any substitute for it by which the work of improving streets in the municipalities of California could be carried forward.

It is to be presumed that the next Legislature of California will enact some Statute upon this subject, or will amend the acts already existing in such a way as to make them effective. If such Legislation is undertaken a proper opportunity will be presented for securing legislation which will make street improvement practicable and at the same time will make as light as possible the burden upon the tax payers along the line of streets to improve which cities and towns may take advantage of such Statutes.

The Vrooman Act itself grew out of



a multitude of Statutes, many of them local in their application, which were in force previous to the adoption of the new Constitution and some of them continued in force until the time when the first Vrooman Act was passed by the Legislature.

The most important matter to be considered in the adoption of street improvement laws is how to secure the best results with the least tax upon the property which must bear the burden of the improvements; and the apportionment of taxation thus becomes the prime question to be considered in drafting such statutes.

Mr. Justice Sawyer in the case of *Emory vs. The San Francisco Gas Company* decided as early as 1865 speaking upon this subject and particularly of the principles of apportionment of taxes and commenting upon the sections relating to taxation for street improvement purposes found in the various Charters of San Francisco which had been in force previous to that date, says: "It possibly might tend to promote equality and justice to leave to the local communities which have the supervision of this class of improvements, the discretion to adopt that principle of apportionment which the exigencies of each particular district for improvement may require. In this State particularly with reference to the City of San Francisco nearly if not quite all the various methods of apportionment have been tried and among them the advalorem principle had been pursued. Each was in turn attacked as unjust and abandoned. Under the first Charter of San Francisco enacted in 1850, one-third of the expense was paid out of the City Treasury and two-thirds paid in equal proportion by the land on both sides of the streets, but the principle of apportionment is not indicated. Under the Charter 1851 and 1855, the apportionment was according to the benefits. The great reform Charter, the Consolidation Act of 1856, adopted the front foot principle and

this continued in force until 1859, when it was amended and an advalorem apportionment adopted. After trying this system two years and after having given each principle a fair trial, in 1861, the Legislature again returned to the front foot principle which had been in force from 1856 to 1859, the only instance of a return to a principle once tried and abandoned and finally in 1862, after twelve years of experience, the present principle of assessing upon the front foot was continued, and from reasons which it must be presumed must have been satisfactory to the Legislature."

After years of experience it would seem that the words of Justice Sawyer, that as much discretion as possible should be left in relation to street improvements and the taxation necessary to carry them on, to local communities in which the work is to be done have lost none of their wisdom.

Until recently it has been possible for the Legislature to impose upon every municipality in the State, any system of street improvement legislation that its members might think proper. The recent San Francisco Charter decision of the Supreme Court has settled once and for all the status of City Charters of California, and under Section 6 of Art. 11, of the State Constitution as interpreted in this decision, every Charter City at least may by adopting a system of street improvement, placing the same in its organic law and securing the consent of the Legislature thereto adopt any plan or any number of plans that the people of the City may deem wise.

Of course from the language of the opinion in the Charter case, technically called *Fragley vs. Phelan*, it must be inferred that if Charter Cities have not provided for street improvements in their Charters the Legislature may do so.

It becomes important then to all Charter Cities as well as other municipalities of this State provided they

have no system of street improvement laws in the Charters themselves, to either amend their Charters before the meeting of the next Legislature so as to adopt some system of street improvement or to exert all their influence to have fair statutes passed by the Legislature upon this subject.

Several systems of apportionment of assessments for street improvement purposes have been in vogue at different times in the municipalities of California.

It is conceded I think, that no one of these systems of apportionment is entirely satisfactory in every locality, and it is only reasonable to say that even in the same City no one of the systems is found entirely satisfactory for every piece of street work that may be necessary therein.

The front foot plan of apportionment is not always just. Streets must be improved which are used quite as much if not more, by people whose property does not abut upon the street as by those whose property fronts thereon. For instance a City may lie on both sides of a stream. There may be but one way by which the people of a populous and wealthy section can find access to the business portion of the town. The street by which they must thus travel may be a long one. The property fronting upon it may be of little value, so little indeed that a front foot assessment to bear the expenses of properly improving the street would be practical confiscation. In such a case why should not the whole City bear a portion of the expense, or at least why should not the portions of the wealthy district which is so greatly benefited by the proposed improvement be assessed to help bear the burden of the expenses of making it. On the other hand, the Vrooman Act according to the opinion of many attorneys as it now stands, provides a system of district assessment whereby the superficial area of a large district lying for many blocks on either side of the proposed

improvement may be assessed to do the work.

How manifestly unfair it would be for a City Council to take advantage of this provision for the purpose of improving a place or way which comes to an end five hundred feet from any street and forms merely a blind alley or *cul de sac*, used only to accommodate the property holders whose houses front upon it. No outside property could, as a matter of fact, be much, if at all, benefited by the improvement of such a place, but if opinion is correct, a large district lying about it might be assessed to improve such an alley.

It would be almost if not quite as unfair for the city to pay out of its treasury for the improvement of such streets. To tax the people of a city generally for money with which to improve a street which might lead only to a private park of an individual, and along whose line no one might own property upon which he cared to build or which was of any particular value, would also be unjust, yet such streets exist in many cities in California.

From this very brief statement and these few illustrations it seems to me that a system of street improvement should be adopted by the Legislature of California, by which the governing legislative body of a city or a board of public works, if the city has one, may adopt any one of the plans which have been in vogue in California in the past in street improvement, or other plans which may be suggested by which street improvement can be done. The widest liberty should in my judgment be given to the cities themselves for selecting methods of assessment for street improvement. Public sentiment in a municipality will prevent the abuse of discretionary powers of this kind if lodged in the City Council.

In addition to this, cities should either adopt the general statute as a part of their charters, or should be permitted to enact such other laws as to their people might seem most convenient for the



purposes of particular localities.

Giving the matter into the hands of the cities themselves, and permitting them to have a wide choice of methods and experience, will in time justify the statement that the cities can take care of their own affairs; but to enact unjust and partial laws and tie the cities rigidly to these statutes, permitting the exercise of no choice by the people of the cities where the work is to be done in regard to the manner of the assessment and opposition, often if not always just, will prevent proper improvements from going forward. If justice is done in the matter of distributing the burdens of such work, little if any opposition will be made to it.

MR. BEASLEY—Perhaps it may be well to say at this time that I think street improvement legislation adopted by the city itself, should be placed in the organic law of the city, rather than that the subject should be left to ordinances that may be adopted from time to time by shifting councils. The exigencies of city politics might make such acts very uncertain, while the elaborate machinery that is necessary to be called into play for the adoption of a charter would make a street improvement law, once placed in the charter, a practically certain thing. Of course, there is something else to be said on that subject, something that was said a few moments ago by a gentleman with whom I was talking, and that is that the charter of a city with such an act incorporated in it would place the city in such a position that it would be necessary for the Supreme Court to largely interpret every section of the provision it might adopt, especially if it did not lay along the lines previously passed upon by the Supreme Court. That might be an objection to this question of legislation.

As to the last matter discussed in my paper, San Jose is in a peculiar position. It will need the decision of the Supreme Court to determine where we stand, no matter what the Legislature

does. The Board of Freeholders which framed the present charter of San Jose two years ago, used pointblank language adopting the Vrooman Act as it stood into the charter as a part of it for the purpose of street improvements and sewer buildings and such things. If the Vrooman Act shall be amended, the question that will arise with us is whether the amended act is the proper act or whether the original act is the proper and valid act under the charter. I believe the Supreme Court has decided that you may measure such a provision by a statute that has been repealed, and I suppose that might be in the charter and we would be bound by it, no matter what statutes were passed. The Vrooman Act is in San Jose a dead letter, because we never attempt to improve a street there but what at least half of the property-owners along the street object and thus veto for six months at a time continuously the making of the improvement. So it does seem that the City of San Jose is in the worst position of any city in California upon that subject, unless some other one may be in a like situation. I think if we could only get a general statute passed by the Legislature, in the place of the Vrooman Act, it would be very much to the advantage of the conduct of our municipal affairs. (Applause.)

MR. RICHARDS—I believe none of the other gentlemen upon the program are prepared with papers or are present at this time, therefore I think we had better now enter upon a general discussion of this subject which is so interesting to us all.

MR. HUTCHINSON—Guy R. Kennedy, the City Attorney of Chico, is present, and we would like to hear from him.

MR. RICHARDS—Will Mr. Kennedy kindly let us hear from him upon the subject?

MR. KENNEDY, OF CHICO—Mr. President and Fellow Members: Perhaps I can relate to you some of the experiences that the City of Chico has had with the Vrooman Act that will be of

interest. Three years ago we did considerable work under that Act, and it worked to perfection. There was no trouble at all. People were very willing that the streets should be improved, or rather, they thought the law would be binding upon them and it would cost them more money if they fought the improvement. So they did not fight it, but all acquiesced, and the streets were built and they were good streets. But since then the people who owned property have become educated, as it were. They have read the Supreme Court decisions very attentively. So now, when you say "street work," they simply go and hunt up an attorney and hunt up the property-owners fronting on the street, get a majority of them, and protest, and then politely ask the Board of Trustees, "What are you going to do about it?" Then another thing. Even where everything has progressed to the time of letting the contract, the contractors up there have studied the law so much that they have got afraid of the entire Vrooman Act, and you can hardly hire one of them to put in a bid. They say, "Well, I don't know. I don't want to buy a lawsuit. I have got plenty of work outside, and I think I will do that and somebody else can do the street work."

So, as the Vrooman Act stands with us at the present time, it is impossible for the city to do any street improvement work at all. The contractors are afraid of the law, and the people know what they can do, that is, if a majority of them join forces and put a perpetual stop to the work.

So if the cities in this State are to improve their streets—and the improvement of the streets is one of the most necessary things in a city, because without good streets, your town looks anything but well, it is unhandy, the business of the town cannot be carried on in the same manner that it can if they have good streets and sidewalks, and it is an injury to the town—if our

cities are to improve their streets, I say, and if they expect to make any progress in the looks of the towns and in their general welfare, that would tend to build them up and make them better, there must be some law passed that will allow Boards of Trustees the absolute power to carry through street improvements and carry them out against the wishes of the property-owners. Because on almost every street you will find the majority of the property-owners against improvement. They do not see how it is going to benefit them. They want to hold on to their money. They do not want improvements; they do not want progress. They want to stand just where they are. So long as that is so, there will be no improvement. But as soon as the street is graded, graveled and has a presentable appearance, and they find that their property enhances in value, you will find good buildings going up on the street, and property in every case will continue to enhance in value until it has more than made up the slight cost of grading the street. That has been our experience with it in Chico. On streets that before were full of ruts, with no buildings at all along them; after they were graded and graveled and looked presentable, you would see new dwelling houses going up. I think that is so in almost every place where street improvement work has been done.

As to the future, I think this convention should appoint a committee to attend to the drafting of a law that will be shorter and more certain than the Vrooman Act, and have that law adopted by the Legislature. It will be a great work accomplished, if it can be done, and a work that is peculiarly within the province of this convention. It is something we all have a common interest in, and we are the people to take hold of it and do it. If such an idea is started and it becomes known that a certain body representing the municipalities of California have it in



hand to draft such a law, we will receive suggestions from many people as to what should be embodied in the law. Some of these suggestions will be good and some will be bad, as a matter of course. But from all the suggestions we receive and the experience we have had, we should be able to draft a law that will stand the test of the Supreme Court and be able to satisfy the people—a much more simple law than the Vrooman Act, and one that will give the governing board of a town the power to carry out street improvements and not leave them as they are now, figure-heads. I think if we succeed in doing that one piece of work we will have done much for the municipalities of California. (Applause.)

MR. RICHARDS—We would like to hear a few words upon the subject from J. T. York, City Attorney of Napa.

YORK, OF NAPA—Mr. President and Gentlemen: I came here this morning more to listen than to attempt to enlighten the convention upon this question. However, you may be interested to know how matters have gone in Napa, and so I will address you briefly upon our experiences in street improvement work.

Napa has had litigation over street laws from its early days. I think some fifteen or twenty years ago it was attempted to grade a street there under the law granted them in the charter. They had a special charter under the usual form at that time. The proceeding was bitterly fought and resulted in litigation, not only in the courts locally, but also in the United States courts, notably in the case of Easterby vs. the City of Napa. That litigation was very expensive, although the city finally won on all points. The proceeding there was as to the grade of the street more than anything else.

Since the establishment of the Vrooman Act, there has never been any litigation directly in the city of Napa, but there has always been more or less protesting, thus stopping the work. We

have found that as a usual thing the people will protest against street work if they cannot stop it otherwise. I think that is the general experience everywhere. Personally, I am not in favor of the passage of acts applying only to one city. I think that by doing that you are simply piling up litigation in the State everywhere, without receiving from the other cities any benefit from their litigation. I think if we can get one act passed, one general act, it will be of more benefit to people and to the municipalities generally, than to have distinct and independent acts applying to distinct and independent cities. Napa has a freeholders' charter, but the street law is not incorporated in that charter. I think it will be much more beneficial if the Vrooman Act is so amended as to make it simple enough so that both the people and councilmen can understand its provisions, and so that the city attorney will not have to prepare every detail and every paper, and thus avoid the constant litigation over the minutest details of the performance of the Street Act. It ought to be simple enough and direct enough so that it can be understood.

Another suggestion that occurs to me is with reference to the collection of assessments under the Act. There has been considerable difference in the matter of collection. First the city collected the amount of money required to perform the work in advance of the work being done. That was found not to meet the requirements or necessities of the case, because frequently the work would cost more than anticipated, after they had started to do it. So that resulted in a great deal of confusion. Thereupon in some places the method of collecting the amount by the city was adopted, by which the city became liable for the payment of the bills, and the Vrooman Act itself provides for the payment of the bills, not by the cities, but a lien upon the property, the bills to be collected by the contractor, which also leads to considerable trouble. It

seems to me that, having awarded the contract and put the contractors in that situation, the city authorities ought to in every way possible protect contractors. If they have performed the work properly and have a fair compensation, they ought to receive the assistance of the city to some extent, and not be turned loose to collect their money from the property owners, if they are able to do it. They ought to have the power of the city behind them more than they have under this present act. If it is possible to create a lien in the nature of a tax lien that would not require litigation against every individual taxpayer on the list, it would be of advantage, I think, to the contractor, and would be fair to him.

The Vrooman Act, while it has worked fairly well with us, has made us use the utmost care at all times in the carrying out of its technical provisions. I do not think there is on the statute books anywhere a more technical statute. If it is possible to simplify it so that we may be able, not only those who are learned in the law but others, to understand all of its provisions, what it is, its purposes, and how to put it in force, it is certainly a very advisable thing to do. (Applause.)

MR. RICHARDS—We would be glad to hear from C. W. Finch, Superintendent of Streets of Riverside, upon the question.

MR. FINCH—I am not a public speaker, gentlemen, but only a plain Superintendent of Streets. There is no doubt but that the law needs amendment, though I do not think it should be too sweeping. There have been a great many decisions upon the Vrooman Act, and it seems to me it would be foolish to throw everything we have away and start anew. In fifteen years we might get back to the point where we are with the Vrooman law and be no further ahead.

MR. HUTCHINSON—I would like, Mr. President, to ask Mr. Finch a few ques-

tions. Are there any objections to the Vrooman Act, in your opinion?

MR. FINCH—Oh, certainly, a great many.

MR. HUTCHINSON—What are some of them?

MR. FINCH—It is too long and cumbersome, as the gentleman who has just spoken has said.

MR. HUTCHINSON—In your work, you must have met with obstacles in connection with the different matters. Can you state some of them?

MR. FINCH—In what way? The working of the law?

MR. HUTCHINSON—Yes. I would like to get at some defects of the law from your standpoint. You have the practical end of it, and I think your advice would be valuable.

MR. FINCH—I think the worst feature of the law is one that has already been pointed out to you, namely, that there is a good deal of preliminary expense attached to the matter, and when you are ready to go ahead, the six months' bar stops you, and the improvement which is greatly needed is stopped.

MR. HUTCHINSON—What is the expense you incur before the protest is filed?

MR. FINCH—The publication of a long resolution of intention, and notice of resolution of intention, and the posting of certain notices, all of which falls back upon the municipality if the protest is allowed.

MR. HUTCHINSON—Would you suggest changing the law in that respect?

MR. FINCH—I would suggest changing the law in respect to so much publication. It is evident that the newspaper man was in evidence when the Vrooman Act was passed. In the smaller towns they make combinations on their rates and raise the rate until the simplest piece of street work will cost from \$50 to \$100 for the legal notices necessary to be published.

MR. HUTCHINSON—Is that the only



defect in the proceedings prior to the protest, the feature of expense?

MR. FINCH—I do not know that I can say it is the only defect. What I might consider defects, others might consider the best points of the law.

MR. HUTCHINSON—Suppose a protest is not filed, and you go ahead with the work. Are there any defects in the Act after that?

MR. FINCH—I think the fact that the contractor has to collect his money is a weak point in the law. I think the city should be behind the contractor. The contractor always adds a large percentage to the amount of his contract to cover any contingency of loss.

MR. HUTCHINSON—How would you suggest that the contractor be paid? That the city guarantee it?

MR. FINCH—The city should guarantee the collection in some way, perhaps by putting it in the form of taxation. I think it should be put into such form, perhaps, that the owners would be allowed anywhere from five to ten years in which to pay for expensive improvements.

MR. HUTCHINSON—And tax the whole city for it?

MR. FINCH—No; the whole district. I think the district should be outlined. If a revolving fund could be had by the city, so as to pay cash to the contractor, and then allow the expense to be paid back into that revolving fund, or something of that kind could be arranged so as to put the contractor where he could give his very lowest figure and give the property-owners the advantage of that low figure, with time in which to pay it back into the fund, it would be an excellent plan all around.

MR. HUTCHINSON—Do you think of any other objection to the law and its workings?

MR. FINCH—I do not know that I do at this moment.

MR. HUTCHINSON—Do you think the right of protest should be changed?

MR. FINCH—I think they should have the right to bar the work by pro-

test, but not an everlastingly recurring bar every six months. There ought to be some reasonable limit. Perhaps on the second or third protest, their rights in that direction might be cut off.

MR. HUTCHINSON—Then you think the protest should be limited, you think the expenses of the original proceedings should be reduced, and that the city should guarantee the contractor and collect the money itself through a term of years by taxation instead of in one lump sum? Those are the four points you make against the law?

MR. FINCH—That is about the proposition. A guarantee would be useless, if the money were paid out of a revolving fund to the contractor.

MR. RICHARDS—We would very much like to hear from Mayor Eaton of Los Angeles upon this subject. He can give us his opinion from an engineering standpoint.

MAYOR EATON OF LOS ANGELES—Mr. Chairman and Gentlemen: I pointed out the main objections to the Vrooman Act that I have found in my experience, when I had the floor yesterday. There have been some points brought out to-day that I had not thought of before, especially in regard to the assessment. The gentleman who read the paper this morning said that it was a question whether the Vrooman Act would allow us to levy a district assessment for the grading of streets as it does for sewers. We can levy a district assessment for the laying of sewers under the Vrooman Act, but I do not know that it has ever been done in our city for the grading of streets. But I think that that is the proper way to levy assessments, especially for the improvement of main avenues leading into the city. In one section of our town, values have depreciated almost out of sight just because the main avenues could not be graded by district assessment. When it was charged to the local owners, it cost a great deal more than the property was worth. If the tax could be laid on the district that

was to receive the benefit, and people from the outside could find access to the city through this avenue, the entire property would be benefited. And just because this one street is not graded, for instance, the values for a square mile around that were very much depreciated. We have streets in Los Angeles that have been graded and paid for by direct assessment, where the lots, after the grading was done, would not sell for the amount of grading. In such a case, I think it should be paid for by a district assessment. When a district is once established for grading the streets, a fixed amount might be determined as a frontage tax, and all over and above that might be raised by district assessment. That is very similar to our system of taxing and assessing for sewers. Streets where a sewer has been built under the Bond Act—that is paid for by the general public—we assess a given sum per front foot when the connection is made. That amount is arrived at by the average cost of building a lateral sewer. It seems to me that in grading the streets, all the property owners in that district should be assessed so much a front foot, including this main avenue, and if the expense exceeded such amount, lay the balance of it upon the whole district.

Mr. Finch will perhaps not agree with me in my statement that we do not get the results by having this work done under the supervision of the Street Superintendent as if it was done under the supervision of the City Engineer's office. Mr. Finch is a very competent and conscientious official, and has had the advantage of experience in contracting work which fitted him especially for the position. But you will not find such a man elected to the position of Street Superintendent usually. Generally he has not the peculiar qualifications to do that sort of work. It requires an engineer. The City Engineer is always elected on his technical knowledge, and he is the proper one to have charge of the work

until it is completed. It is very proper for the Street Superintendent to take care of it and maintain it after it is completed, but the City Engineer ought to build it.

We have had a great deal of defective work just through ignorance. The Street Superintendent was honest, but the inspectors that he appointed to carry out the work were not competent. He did not realize the importance of having competent men. And generally, you will find in such positions men who simply have a political pull, who do not know what they are about or what is going on. You are more likely to find a shoemaker or a bartender or somebody of that kind as superintendent of building a sewer, than anybody else. It is not always the case, but I have found it in many cases. I know in one case I myself paid \$2700 assessment on some sewers built in a tract of mine, and the inspector used to sing in the opera. And yet the inspection cost me eleven per cent of the cost of the work, which was all out of proportion.

As to this right of protest, I think that should be changed. Property owners should have the right to protest, because very often contractors for their own benefit get up jobs, and if people have the right to protest, the contractors would work many jobs through the councils simply to get the work, and there would be lots of streets improved where there was no necessity for it. There is no use in burdening property with these improvements until the time is ripe for them. You have to maintain them. You have to sprinkle the streets. And there is a useless expense entailed unless matters have advanced far enough to require the improvement. There should be a right of protest. But, on the other hand, the property owner should not be in a position to delay work forever, or too long. I think that when the council decides that the work is necessary in a general district, that the property owners of that immediate street should



not have the entire say. Of course they should have it, if they had to pay all the expense. But if part of that expense was distributed over the entire district, then the right to protest should be limited.

I have not done any work under the Vrooman Act. I have had nothing to do with it for several years, and really, am not in a position to say much about it. When I did have to deal with it, I did not have much use for it.

There was something said about how the assessments should be paid. Under our charter we collected our assessment after we got the bids for the work and knew just exactly how much we had to raise. The property-owners had thirty days in which to pay the assessment, and if they did not pay it within that time, their property was sold. In that way we had no difficulty whatever.

MR. HUTCHINSON—Is that in your charter?

MR. EATON—In our charter, yes. It was paid for before the work was commenced. We always got very satisfactory bids. When it was ascertained that we should operate under the Vrooman Act, the bids increased at once from fifty to one hundred per cent, and it was just one continual lawsuit from that time on. We always had lawsuits, and the bonds that have been issued on this work have always been depreciated. I know at one time the bond buyers thought the thing was settled, and I believe the bonds got up as high as 98. But it was only for a short time. I was going to take in a lot of them myself, and in about three days there was some decision that knocked them down to nothing, and you could not get anybody to take them. That should not be the case. The property-owner is the one who suffers. That should not be. If you are going to issue bonds for street work, they should be just as good as general improvement bonds. If it is possible to issue these bonds, even on a district or street, holding the

entire property for the amount instead of each separate piece, as it is now, and having them in a way guarantee these special improvement bonds as it is done in many cities East, the bonds would sell and be taken at as low a rate of interest as the general improvement bonds are, and besides that, you would get your work done at least 25 per cent cheaper. I believe that some constitutional amendment may be necessary to accomplish what is requisite, but if it is desirable, it would perhaps be good work for this League to get up such an amendment. I do not think of anything else just at this moment, and I thank you for your indulgence. (Applause.)

MR. FINCH—I think as Mayor Eaton does, that it would be very much better if the Engineers had charge of the work of construction. They are better qualified to take charge of it. I think that if the assessment was made by the City Attorney instead of the Street Superintendent, that would be better, too. The Street Superintendent is not competent to do many of these things that he is now authorized to do.

MR. HUTCHINSON—Will you explain, Mr. Finch, what you mean by a revolving fund? Who begins it?

MR. FINCH—I think the best way to start such a fund would be to levy a certain amount on the entire city. After your fund was once organized, everything that was paid in for street work, could go back into it.

MR. HUTCHINSON—That is, you would draw on that fund to pay for the street work as it came along, and then collect the assessments year by year and turn the money into that fund?

MR. FINCH—Somewhat after the fashion of the school bonds. In every school district in the State, they may issue bonds and make improvements, and then pay up the amount gradually.

MR. HUTCHINSON—What do you think of that scheme, Mayor Eaton?

MR. EATON—I do not know. It might work all right in a small place,

where there was a very large amount of work. It would take a very large fund, would it not?

MR. FINCH—In the large places, a small tax rate would raise a large amount, and in the small places of course a smaller amount. It would work out as well in the large cities as in the smaller ones, I think. It might be that you would want to levy a tax of a small amount for two or three years to get your fund started.

MR. EATON—We are doing three or four hundred thousand dollars' worth of street work in a year, sometimes. That would require a pretty large fund.

MR. FINCH—Yes, but your contracts would be gotten out very much cheaper if there was cash in hand with which to pay for them. As you say, under the charter you got very low bids, because your contracts were paid up on at once.

MR. MASON—I would like to ask Mr. Beasley a question. In view of the fact that the Federal Courts have almost uniformly decided that special assessments for benefits could not be made in excess of the actual benefits, is it not going to be necessary in any future law to provide for what we might call a "day in court," where all property-owners affected or to be affected by special assessments could appear and have those assessments adjudicated?

MR. BEASLEY—It is a question what the Supreme Court of the United States will do with the case of Norwood V. Baker. I do not think anybody can tell now what will be done. I understand that two or three Superior Courts of this State have already passed on questions on which that decision seemed to bear, and have radically disagreed,—good Judges, too. Some kind of a definite judicial determination will be necessary, I think, under that case. But the City Council may exercise certain judicial functions, as the Supervisors do at times, and I do not know why a determination of what the bene-

fit shall be upon each front foot may not be passed upon by the City Council.

MR. MASON—Would it not be a matter of wisdom, then, to incorporate such a provision in an act to be submitted to the Legislature?

MR. BEASLEY—Under the Vrooman Act, it is contended that this will be a judgment of some officer or set of officers, the Superintendent of Streets in one case and Council on appeal in others. The case of the Village of Norwood V. Baker was decided about five years ago. It was a case that went up from the State of Ohio. The question there involved was upon a radically bad assessment, one that confiscated a block of property to improve a small street running through the block, if I remember.

MR. MASON—It was a street-opening act, was it not?

MR. BEASLEY—A street-opening act, yes. The property was assessed twice, too; that is, the street that was taken was assessed, and the balance of the property as well. It was evident on the face of it that the whole thing was a bad piece of work, and you could almost read politics into it if you read between the lines. That is why the Supreme Court took such a radical view upon the subject. The question never will be settled until the Supreme Court has again passed upon it. But certainly it would be the part of wisdom to place some sort of a judicial determination of these questions, by council or in some other way, as to how much benefit is derived by each piece of property from the work. The Vrooman Act does that now, so perhaps the Vrooman Act might stand upon that point.

MR. HUTCHINSON—What do you think of Mr. Finch's proposition about the revolving fund and the general tax?

MR. BEASLEY—I do not know. I had not thought of that before.

MR. HUTCHINSON—There could not be any constitutional objection to that, could there?



MR. BEASLEY—No. There would be a charter objection in San Jose. I do not know that that would be the case in any other city, though. Our charter is a very excellent one, but it is a peculiar one in some respects. It seems to me that these various payments ought to be extended over some little period of time; that is, at first blush it seems so.

MR. HUTCHINSON—Still, that plan, if adopted, would not do away with the difficulties in the way of a fair assessment.

MR. BEASLEY—No, it would not. And that is the great difficulty in the way of forcing these people to pay the assessments, in my judgment.

MR. SPINNEY, OF FRESNO—This might be a good plan: To have the municipal body find out how much they want in improvements for a certain year, and how much money it will cost, and when they levy the tax for all purposes, let the tax rate include that much improvement on the streets, so making a fund for the purpose just as they do a sewer fund or the general fund. Then the money would be paid in from the whole city for that purpose. The Mayor of Los Angeles says they spend a very large sum every year. So they could raise the requisite amount by taxation every year. You would improve your city so much in the year, and at the end of the year you have your improvements, and there have been no lawsuits and no fights, and everything goes along agreeably. We are having the same trouble in the City of Fresno that the other gentlemen speak of, every little while.

MR. HALE, OF MARTINEZ—Mr. Chairman, there is one thing to be borne in mind, and that is the fact that street improvements are of two kinds, one of which is for the benefit of lots fronting upon the street only, and the other of which may be said to be of value to the whole city. Frequently, in a small town, there will be a long street running into the town over which all the

traffic of the town goes. Improvement of that street might properly be paid for by the whole town, while the same thing would not be true of the other class of streets.

Then in regard to the protection of the contractor. We, as Trustees, do not particularly love the contractor, but we sometimes feel the effect of the hardship worked upon a contractor by the Vrooman Act. For instance, in our little village we have two or three times within the last few years advertised notice of intention, and then failed to get a single bid, because the value of the improvement was not very great and the money to be made out of it was not much, and the contractor would not pay for the expense and run the risk. Why would it not be possible that, in place of making the contractor collect these amounts, to make them a lien upon the property, payable with the next taxes due, as a tax lien upon the property, for the proper proportion of the assessment, and then let the town pay the contractor?

MR. BIENENFIELD—It seems to me that Mr. Spinney has just about hit the meat of the whole proposition, Mr. Chairman. There is hardly ever any action in regard to street work that does not meet with opposition. Street work is for the public convenience. Why, then, in all equity, should not the public pay entirely for such work? It seems to me that, while a revolutionary idea, it is really at the bottom of the trouble. The streets are dedicated to the public, and the public use them. It is a public service; the street is a public thoroughfare. And it seems to me that the method outlined by Mr. Spinney is a good one, that all street improvements should be paid for out of a general fund raised either by direct taxation or by the sale of bonds. That would certainly do away with all the difficulty, and I think that sooner or later our Supreme Court will have to recognize that principle.

MR. HALE—There is one great ob-

jection to that. Suppose you have got ten miles of street to fix?

MR. BIENENFIELD—You can obviate that by issuing bonds, if there is so very much to be done. Let bonds be issued to cover all of the work.

MR. SPINNEY—Mr. Chairman, that proposition can be fixed by the Board of Trustees before the levy is made. The intention of the voters is to do so much work, before the assessment is made, and before the work is to be done, the city passes an ordinance. The Board of Trustees, working in the interest of the city, determines to do two or three blocks of this street, and a block of that street, and so on, making up the money for the first year, regulating it by ordinance. The next year the same thing goes on, and finally it is all built according to the original design. By doing it in that way, everybody would pay a percentage, and the work would be done cheap, and you have no lawsuits and no fights with the contractors or with the property owners. You have so much money in your treasury, and you go right along with the work. In other ways, we have trouble all the time, councils divided, and people putting in petitions against it, and we cannot improve our city.

MR. JOHNSON OF RIVERSIDE—There is another very strong objection to the method suggested, and that has reference to the case of a city of magnificent distances, like Riverside. Riverside is about fifteen miles long, and we have in the city highly improved property and bare fields. There are people who will not vote to have any such thing as is proposed done, when they themselves have already paid for improving the streets in connection with their property.

SECRETARY MASON—A suggestion occurs to me, called forth by the statement of Mr. Hale, that they found difficulty in getting bids. Why would not a street law be proper that provided that in case no bids were received, the city should go on and do the work it-

self under the direction of the proper officials by day's labor? Why would it not be well to at least give the city a chance to do its own work, and reject all bids that might be offered? Because it is barely possible that the contractors might form a combination and run the cost up a great deal more. It would be a protection to the property-owner to have the city itself in a position to do all the work, and then the city to take the place of the contractor and claim the assessment.

MR. EATON—The property owners have that right now under the Vrooman Act when three-fourths of them sign the petition.

MR. MASON—But not as a whole.

MR. EATON—Yes, it must be as a whole.

MR. TURNER, OF MERCED—Mr. President: In Merced we have not had any street improvements under the Vrooman Act or in any other way, except patching up our streets every year, doing a little here and a little there. But it has come to the point where we have to do something in that direction. The people demand it. But when we undertake to do it and go to the property-owner, he does not want to do his portion. Of course, if we undertake to do it under the Vrooman Act, we are put off upon the proposition that the protest will be filed and the matter delayed six months. I do not know how often that can be done, but there certainly ought to be a limit to it. Our Board of Trustees has thought the matter over, and we have come to this conclusion: Why would it not be a good idea if the property-owner on each side of the street were called upon to pay one-third, and the city to pay the other third, the center? In that way the people generally would be paying for the portion that they themselves use, you might say. One gentleman says that the property-owner perhaps does not receive the benefit that he has to pay for. We might say that he receives one-third of the benefit that he pays



for; that is, if he builds one-third of the highway, and the man opposite him builds one-third, why should not the city pay its one-third? In that way I think we could build lots of streets. I agree partially with Mr. Spinney's idea, however. Take cities of the sixth class, and we can only raise 75 cents on the one hundred dollars in taxes, and that does not go a great ways in building streets. But if we should make, say another 75 cents for the purpose of improvements, without being obliged to issue bonds, we could get along first rate. Of course, we are here to talk these matters over, and to give this legislative committee that is to be appointed some pointers, so that when they get together after a while they can draw an act to fit all of the cases which will arise.

There are, in fact, lots of things we can talk about. There is the license matter. While I am up, I will speak about that. The County Supervisors come into our town and levy such licenses as they please. For instance, they levy a liquor license of \$200 a year, and the city license is only \$60. We claim that we ought to have the whole of the \$260. What business has the county coming in there to collect licenses? It is the city money that pays it. We pay for general purposes the state and county tax, and why should they levy an assessment by way of a license inside the city limits in addition to that? The saloon men there say, "We are willing to pay \$300, if it all goes for improvements inside the city." If they will give us all of the license money, we can build a good many roads, and perhaps it would be unnecessary to levy this large percentage that Mr. Spinney speaks of. Of course, we want this legislative committee to take that into consideration when they are making up their acts to be introduced into the Legislature.

There are other things that do not come to my mind now, but hereafter I will give them to you.

A DELEGATE—In regard to the proportional payment for street work mentioned by Mayor Turner, I believe they have already inaugurated that system in Oakland, the city paying one-half and the property-owners one-half. I believe they have paved some streets in that way. I would like to inquire if there is some gentleman present who can inform us as to that.

MR. HALE—We had quite a large sewer to build—that is not street improvements, but it is to the point. The Board, before they passed their resolution of intention, passed a resolution agreeing to pay 25 per cent of the cost. Then they went ahead as usual under the Vrooman Act, and when the contractor saw that the town was to pay 25 per cent and the balance to be issued under the Vrooman Act, a better rate was obtained, and the work was done and the money collected. I do not know why that is not a practical idea. So far as the proportion is concerned, you could make it 25 per cent or 33⅓ per cent or 50 per cent—any amount that you saw fit.

MR. TURNER—I would like to ask if that is legal.

MR. HALE—That is legal, under the Vrooman Act.

MR. HUTCHINSON—Mr. Chairman, I would like to make a few remarks upon that subject. I do not know much about street work; we have not done anything under the street act in Palo Alto yet. We haven't got ready for it. We are in something the same condition as Merced. But I think some of our experiences there will illustrate some of the principles discussed this morning.

We first took the water works, and then the sewers, and are going on with street work next year, and we are face to face with the question. It really seems to me, in spite of the objections that have been made to the remarks of the gentleman from Fresno, that he really has suggested the best method out of this difficulty. The difficulty

with the Vrooman Act and all of these assessment acts is, that they suggest to property-owners an illegal interference with their rights. That is, they are attacked upon the constitutional ground that the city is taking property without properly paying for it. That is what it amounts to. That is the cause of all this litigation. Men feel that their rights are being interfered with, that their money is being taken out of their pockets to pay for a benefit to the public. Possibly the scheme suggested by the gentleman from Fresno will not work in larger places. But let me tell you our experience in Palo Alto on the sewer question. We had to make three attempts there before we succeeded in getting our sewer system. The first time we undertook to build one-third of it out of the town funds, the other two-thirds to be under the Vrooman Act. That was defeated by a close vote. We then got up a scheme we thought would please the people better; had a new engineer make new plans and had it approved by the Engineering Department of the University, so we felt sure it was a good system. Then we undertook to use \$20,000 of the town funds and let the people pay the other \$40,000, the same proportion as in the original scheme. They beat that. Then we thought we would divide it up into districts, on a plan very analogous to the plan of street work in vogue. They defeated that. Finally it occurred to us that if we adopted this very scheme that is suggested here, the people would take to it, that is, bond the town for the whole of it and put the sewer in front of every house in town. We submitted the proposition to a mass meeting, there was no opposition to it at all, and at the election there were over two hundred in favor of it and only six against it. The sewer system has been put in on this scheme. Now we are confronted with the question, How are we to enlarge our sewer system as the town enlarges? Of course, as we have given every man who had a house

when we got up our present scheme a sewer in front of his house, we cannot use the Vrooman Act, or any other kind of proportional scheme, but have got to pay for the extensions to the sewer system out of the town funds. And we will have no trouble about that. Every year some of the General Fund is to go into increasing the sewer system where it must be increased. It will be a gradual growth, and in a few years we will have the whole town sewerred, whatever its size.

Why is not the street improvement work analogous? And if we adopt that, would it not get rid of all these constitutional difficulties and all this litigation?

MR. TURNER—Then you claim that you can farm your town out in districts?

MR. HUTCHINSON—We do not do any particular districting. Our system was made to include all of the inhabited portion of the town.

MR. SPINNEY—Mr. President, I only wish I were feeling well to-day, so that I could go into the details of this matter. I think the plan I have suggested is much the better one.

Mayor Turner mentioned the license question. While a city like San Francisco does not have to collect licenses, we poor cities in the interior have to collect licenses in order to keep the property in order. With us, the county collects more licenses in the city than the city itself does, and they give us nothing in return for it. They furnish us no water, no light, and no police; we do not get anything in return. And I am in favor, as Mayor Turner says, of having the city collect all the licenses within the incorporated limits, and have the money go into the city treasury.

MR. BEASLEY—Mr. Chairman, there is no difficulty with Mr. Hutchinson's plan. It works all right in Palo Alto. But they are starting with an absolutely new town, seven or eight years old, and with nothing done. No one has expended large sums of money in improving the streets in front of his prop-



erty. In San Jose, for instance, the position is somewhat different from that, in this, that the business portion of the town and a considerable part of the residence streets have already been paved with bitumen at a tremendous expense to the property holders whose property abuts on those streets. It would seem hardly fair that these people should be now, after paying out large sums of money to fix the streets in front of their places of business, compelled to pay taxes into a general fund for improving streets in front of the property of other people who are equally interested in the improvements already made in front of their property. That is why I think my idea on this subject is a logical one. Every city in California has different problems to face in the matter. Why not adopt some law simple in its form, with all these suggestions incorporated? We should have a law simple, effective, and easy to carry into effect, making use of the present decisions of the Supreme Court, and giving to each municipality a choice of several good systems of street improvement. I do not know whether I have made myself clear, or not. For instance: if San Jose wishes to adopt one of half a dozen plans for the improvement of its streets, if it wishes a front foot assessment, if it wishes to make a general assessment, or if it wishes a front foot assessment for one street and a general assessment for another, and a district assessment for another portion of the city, let its legal, legislative body, elected by the people and responsible to them, determine what form is advisable and expedient in the different portions and under the different conditions. Why not give the city the right to adopt the method or methods it thinks best? There are objections, I know, to that, but it seems to me that they are of such a character that they may be obviated. If you will give us such an opportunity as I suggest in San Jose, we will be able, I know, to improve our streets without laying any great burdens on anybody.

There are many streets the improvement of which the city ought to pay for; others that particular districts ought to pay for; and, where large numbers of streets have already been improved and paid for by property owners whose property fronts on that street, it seems to me they ought not to be taxed to any heavy extent to improve the streets in front of other properties that have never come under the front foot principle of assessment.

MR. TURNER—We cannot hope to equalize taxes entirely; what helps one man is more or less to the detriment of another. If you vote bonds, those bonds are payable, portions of them, twenty or forty years hence. All are not equally interested in those bonds.

MR. HUTCHINSON—They will be using the streets twenty years hence, will they not?

MR. TURNER—Yes.

MR. HUTCHINSON—Then they ought to help pay for them.

MR. TURNER—Perhaps so, but the best portion of the town has the greatest improvement. They are improved at once. Perhaps the resident two or three miles out will say that the money is voted, and he wants improvements where he is. We cannot fix all of these at one time. It will take years to do it. I say that you cannot equalize taxes for the improvements, so it is hard to get at which is the best way. But I think that Mr. Spinney's idea is the thing.

MR. SWEET—Mr. Chairman, I represent Santa Rosa, and the remarks of Mr. Beasley apply to Santa Rosa exactly, and I heartily agree with him in the method he proposes. I think some law could be passed that would not only fit some of the smaller towns, but would fit the medium-sized towns, like Santa Rosa, as well as perhaps some of the larger ones, like San Jose. We have two classes of streets, those that are entirely unimproved, never have had any improvements upon them, and those that are partially improved, and those the improvement of which is completed,

bituminized streets. How to deal with those different questions to the satisfaction of all is a very different problem. We have adopted this system so far, that the property holders must grade their streets and gravel them before they will be accepted by the city, and that entitles them to care in the future. We got along very well under the Vrooman Act until we found that the gravel we were using was not the right kind; that it was too soft and would grind up into mud in the course of two or three years, like the native adobe. We went to work and bought a rock crusher, and then people began to object because the crushed rock cost more than the gravel, and from that time on the Court decided the act unconstitutional, we had more or less trouble. Since that time we have had no street improvement whatever. I am very glad to have this subject brought up at this convention, because it is one that we are vitally interested in. Santa Rosa is a growing and prosperous town, and withal a very energetic town; it wants to do a great deal. But, of course, there are certain individuals who are willing to hang back and are real obstructionists, though the majority of the people of Santa Rosa are willing to go ahead, provided they can do it legitimately, and I don't know but they would be willing to vote bonds, or do anything else to raise money to improve the place.

MR. WALSH, OF PETALUMA—Mr. Chairman and Gentlemen: At the last convention I brought up the subject of the Vrooman Act and had something to say about it. I have since seen nothing and heard nothing to change my mind as to the condition of things. In the case of Petaluma, we have a public thoroughfare coming into the city, traversed by farm wagons, improved under the Vrooman Act, which virtually confiscated one piece of property, and there is a case on appeal to the Supreme Court now, from a decision of Judge Burnett, involving it. The cost

of the improvement on the block that the suit is over is more than the value of the block.

When you come to take the Vrooman Act in its entirety, take the advertising, the engineer's pay, the street commissioner's pay, and all, and you can see where the cost comes on to the property holder. Everything is tacked on to the property holder. We had a system once in Petaluma, where one-third of the assessment upon each street improved was paid by the city. It worked very equitably, and all the streets were improved by degrees, until the Vrooman Act came in. Since then there has not been a street improved in Petaluma that there has not been trouble over. There is a street just finished at the present time, and one-half of the property owners have hired an attorney to fight the contractor.

If this convention acts wisely, it will draft a law repealing that act in its entirety and frame a new one. It is very easy to frame a new one, simple in form and yet effective, and then it should be left to the people in each town to vote on any amendment to the act as formulated by the convention, before it goes to the Legislature.

The charters of each town should not be acted on by the Legislature. After they once get a charter, the people in each city should have a right to amend their own charter by a vote of the people. Some four or five years ago, there was some small town here that elected a City Clerk. He was a very competent man, but he had certain enemies who wanted to get him out, and they engineered a bill through the Legislature declaring the office vacant. I would advise this convention to frame a charter, and after that charter is framed, taking in the street law, not allow the Legislature to amend that charter any more, but let the cities adopting it amend it to suit themselves, because the laws of one city will not suit another. In one town they use gravel, and another town has no gravel. One uses



rock and one bituminous rock. Consequently each town should be permitted to vote for itself, and not have the Legislature tinkering with the charter every time the new Legislature comes in.

MR. HUTCHINSON—I would like to move that the Chair appoint a committee of nine after the noon recess to consider this matter and draft a bill, and have them instructed to prepare the bill, in case there should be a session of the Legislature, in time for that special session, calling a special convention of this League to consider it before presenting it; if there shall be no extra session, that the committee be instructed to prepare a bill, in consultation with the city attorneys of every city in the League, and present it to the convention of this League a year hence.

A DELEGATE—That could not come before an extra session of the Legislature, could it?

MAYOR HUTCHINSON—I understood that might be included in the call.

The motion was put by the Chair and unanimously carried.

MAYOR RICHARDS—Is there anything else to come before the League at this session?

MR. HALE—I would like to say a few words upon municipal licenses, as I shall not be able to attend later sessions. In the first place, the general purpose of a license, or the reason why we license one man and make him pay a greater tax than the man who is merely assessed upon his property, is because men in certain lines of business require more public protection and help than a farmer out in the country. The man in business in town needs street lights and police and fire protection and many other things. Therefore it is just that he should pay a little greater proportion of the taxes than other people, that is, should pay a license. But what is the effect in a great many of our counties? The county places a license upon the business man in the city, and

that goes into the county fund and is spent by the county outside of the town, not being of advantage to the man who pays the license. It is true that the city authorities also have a right to levy licenses upon the business man, but they cannot, as a matter of justice, levy much of a license on the business man who has to pay a county license. It would put a handicap upon him as compared with a man outside the corporate limits of the city, or in the next village that is not incorporated. It would put him at too great a disadvantage, so that in fairness to him, we cannot levy much of a license. What I want to do is to introduce a resolution asking the Legislature to pass a bill exempting the business men in municipal corporations from paying any county license, in order that they may receive the benefit of the money they spend for licenses and that it may be spent in the town. The only way that can be done is by paying the money into the town treasury. I have a resolution here which I will introduce. It is as follows:

*Resolved:* That the Legislative Committee of this League be directed to prepare a bill the purpose of which shall be to exempt general business enterprises within the corporate limits of a city from the payment of licenses to the county.

MR. TURNER—I second the motion.

MR. HUTCHINSON—I would like to say that I think such a law would be unconstitutional.

MR. HALE—It could be made constitutional in this way, that it might direct the municipalities to levy a license equal to the license levied by the county, and simply put the fund into the town treasury.

MR. HUTCHINSON—It could be made constitutional better by adopting an amendment to the constitution.

MR. RICHARDS—The resolution will be referred to the Legislative Committee to be appointed by the Chair.

At the afternoon session, the special committee to frame a new street improvement law, or to propose amendments to the present law was appointed, as follows: Joseph Hutchinson, Palo Alto; W. A. Beasley, San Jose; C. W. Finch, Riverside; Fred Eaton, Los Angeles; Joseph Spinney, Fresno; J. S. Sweet, Santa Rosa; Guy R. Kennedy, Chico; J. T. York, Napa, and E. K. Taylor, Alameda.

In connection with the foregoing subject, a portion of the evening's proceedings is herewith appended.

MAYOR HUTCHINSON—Mr. Chairman: On behalf of the Committee appointed by the Chair to investigate the matter of a street law, I wish to say that that Committee met this afternoon, and, after some discussion of the matter, came to the conclusion that the suggestion made this morning, that, in case a special session of the Legislature is called, the matter of a bill for street improvements should be submitted to that session, was not a good one, because it will take at least a year to fully investigate this subject and carefully frame a new law. For this reason, in order to avoid any misunderstanding, I will present this resolution, recommended by your Committee for adoption by this Convention:

*Resolved*, that it is the opinion of this League that it will require at least one year to fully investigate the condition of the street improvement laws of the State and to draft a thoroughly considered substitute for the present law or amendments to the same, and therefore this League requests the Governor of this State to omit from the call for a special session of the Legislature, should such session be called, all reference to that subject.

The resolution was unanimously adopted.

#### AFTERNOON SESSION.

The afternoon session was entirely devoted to the consideration of papers and addresses on the subject, "Experience of Cities with Municipal Water Works." There being no available

space in this number of this magazine, the complete report will be published next month.

The same announcement is made in regard to the proceedings of the evening sessions. The paper of C. N. Kirkbride on "Municipal Licenses," and that of Frederick J. Teggart on "The Value of Municipal Libraries" will be published hereafter.

FRIDAY, DECEMBER 15, 10 A. M.

The Convention was called to order by second Vice President, Mayor Turner of Merced.

THE CHAIRMAN—The first order of business is the report of the Committee on Amendments to the By-Laws. Is the committee ready to report?

MR. HUTCHINSON—Mr. Chairman, the committee is ready to report. The committee has had two meetings, one informal, and the other a more extended one. As a result of it, the committee have drafted a resolution, covering their recommendations, which I will read.

The amendments adopted were as follows:

Increasing the membership of the executive committee from three to five by making the President and Secretary ex-officio members thereof. Changing the "Improvement Committee" to "Engineering Committee," to be composed of five municipal engineers.

Providing that the executive committee may allow the secretary a reasonable compensation.

Providing that the place of holding the annual convention should be determined by the convention.

Providing for annual dues to be paid by the several municipalities joining the League as follows: Cities of the sixth class, \$20; fifth class, \$30; fourth class, \$40; third class, \$50; second and first classes, \$60.

Providing that the treasurer be a San Francisco bank.

The amendments proposed were adopted.

MR. TURNER—The next in the order



of business is the election of officers. The convention is now ready to hear nominations for the office of President.

Mr. Sorrenson of Modesto placed Mayor Turner in nomination.

Mr. Kirkbride of San Mateo presented the name of Mayor Snow.

Mr. Briggs of Redding presented the name of Mayor Sweet of Santa Rosa.

At this point Mayor Phelan arrived and took the chair.

Mr. Turner suggested that Mayor Phelan ought to be the president of the League for another year. Mr. Phelan thanked the convention, but declined the nomination.

The nominations were closed, and the roll being called, Mayor R. W. Snow of Oakland was elected.

The other officers were unanimously elected as follows:

First Vice President, Mayor J. S. Sweet, of Santa Rosa; Second Vice President, W. H. Turner, of Merced; Secretary, H. A. Mason of Santa Clara; Treasurer, The First National Bank, of San Francisco.

The Executive Committee was chosen as follows:

Mr. Lamborn presented the name of Mayor Eaton, of Los Angeles.

Mr. Hutchinson presented the name of Mayor Phelan, of San Francisco.

Mr. Sweet presented the name of Mr. Hutchinson, of Palo Alto.

These were unanimously elected and together with the President and Secretary constitute the full committee.

A special committee consisting of Messrs. Lamborn, Briggs and Franks was appointed to present the names of members of the other committees.

After a brief recess the committee reported as follows:

Judiciary Committee; C. N. Kirkbride, of San Mateo; R. F. Robertson, of Los Gatos; J. N. Franks, of San Leandro; W. A. Beasley, of San Jose, and Walter F. Haas, of Los Angeles.

Legislative Committee; E. K. Taylor, Alameda; D. O. Druffel, Santa Clara;

Taylor Albin, Fresno; Chas. Francee, Salinas; Carl R. Briggs, Redding.

Engineering Committee; C. E. Grunsky, San Francisco; N. S. Frost, Petaluma; Frank Olmstead, Los Angeles; C. E. Moore, Santa Clara; J. W. Johnson, Riverside.

The next order was the selection of a place for holding the next annual convention. The following places were suggested, viz., Fresno, Santa Rosa, Los Angeles and San Francisco.

On the third ballot San Francisco received a majority of votes cast and was declared the place for holding the next annual convention, which will take place the second week in December, 1900.

THE CHAIRMAN—The next in the order of business is Resolutions, if any there are.

A resolution was therefore presented by Mayor Sweet, reading as follows:

*Resolved*, that a special committee of five be appointed for the purpose of investigating the matter of adopting a uniform system of keeping municipal accounts, devising the necessary books of account, and to render an account of their labor at the next annual convention.

The resolution was unanimously adopted.

MAYOR PHELAN—I would like to submit a resolution to the convention. It is as follows:

*Whereas*, the last legislature proposed a constitutional amendment to be submitted to the people at the next election, exempting from taxation the Bonds of the State, Counties and Cities of the State, therefore

*Resolved*, that this convention approves of said amendment and urges its adoption by the people.

MAYOR EATON—I move its adoption, Mr. Chairman.

MR. SORENSEN—Mr. Chairman, I have no objection to the adoption of the resolution, provided it has been thoroughly looked into. This concerns millions of dollars worth of bonds, and

we ought to be very careful in such a matter.

MAYOR PHELAN—What is your doubt, Mr. Sorensen? I might be able to answer any questions. I might give the convention the history of this matter. It was proposed by the Merchants Association, of San Francisco, to the legislature, after being carefully discussed. It was adopted by the legislature by the necessary two-thirds vote, and is to be submitted to the voters at the next general election. The object is to exempt bonds issued by cities and counties in the State from taxation, and the reason for it is this: As they are issued now, our own savings banks cannot hold any bonds of the cities of California, because the interest is only about three and one half per cent, and when you take one and one half per cent or more out in taxes, the net rate is too low. If the citizens of California holds these bonds, he has to hide them from the assessor. The savings banks cannot hide them, and so cannot hold them. So the bonds go outside the State, and when the interest is paid the money goes outside the State, to eastern bankers. It is absolutely illogical, in the first place, to tax your own city. Everybody is agreed upon that. If this amendment passes, not only will the bonds be held here, but it will enable our cities to issue bonds at a lower rate of interest, and a ready market will be had for them. I will state further, that I have never heard of any objection being made to a proposition of this kind.

MR. SORESENSE—It would, of course, be a very foolish matter for me to stand up and argue a question of this kind with you, Mr. Mayor. You have made a study of this question and I have not. But it occurs to me, why is it necessary that this convention should express itself upon a question of that kind, when many of us know absolutely nothing about it?

MAYOR PHELAN—I will give you a case in point, Mr. Sorensen. San Fran-

cisco will issue a million dollars of bonds next year. Under the present law, they will not be purchased in San Francisco or California, but they will be placed in New York with some syndicate. The city will therefore get no revenue from the taxation of the bonds, because they will be held outside the State.

MR. SORESENSE—Won't some other state get at them?

MAYOR PHELAN—New York may tax them, if they can find them, yes. But we are legislating for California. Neither California nor San Francisco, nor any county in the State will get any revenue from them, if they are liable to taxation. So we are in a position to sell them to our own people, if this constitutional amendment passes, and they can be held and freely enumerated among the assets of corporations, and our citizens can hold them without exposing themselves to perjury.

MAYOR EATON—Mr. Chairman, in answer to the gentleman's suggestion, I would like to say that I have investigated this subject. I do not know of any bonds in our section of the country or in our part of the State that are taxed. I know that we cannot get as low a rate of interest on municipal securities if we tax them. I am heartily in favor of the amendment, and I hope it will pass. I regard it as a very important move in the interest of every community in the State.

The resolution was then put to vote and unanimously carried.

MR. JOHNSON—Mr. Chairman, I would like to offer the following resolution:

Resolved, that the thanks of the League be, and the same are hereby tendered to H. A. Mason for his untiring efforts, without compensation, during the past year, to promote success of the League.

The resolution was unanimously adopted.

MAYOR SWEET—Mr. Chairman, I would like to present the following resolution:



*Resolved:* That this Convention hereby express its appreciation of the services of B. F. Lamborn rendered in behalf of the League, in promoting its interests and in interesting municipal officers in the matter of securing this organization upon a permanent and effective basis.

The resolution was unanimously adopted.

MAYOR HUTCHINSON—Mr. Chairman, I offer this resolution:

*Resolved:* That the thanks of the League be and the same are tendered to the Hon. James D. Phelan, Mayor of the City and County of San Francisco, for his invaluable counsel, assistance, and interest during the past year, and for his hospitality and favors extended to the League.

The resolution was unanimously adopted.

MAYOR PHELAN—Are there any other resolutions? Hearing none, I will appoint as a committee under the resolution for a committee upon a uniform system of accounts, Mr. J. H. Breed of Oakland, Mr. Rich White of Chico, Mr. M. L. Hanscom of Berkeley, Mr. Lamborn of Alameda, Mr. Morse of San Mateo.

The Convention then adjourned sine die.

At the close of the convention the members accepted an invitation of Mayor Phelan to indulge in a trolley ride around the city. Two large electric cars were filled by the delegates and a few invited guests. The trip embraced a visit to the Union Iron Works, and an inspection was had of a number of war vessels now in course of construction by this concern. A stop was made at the power house of the Market Street Railway Company, and at many points splendid views could be had of the city and bay. The far-famed Cliff House was reached at five o'clock, where a lunch was waiting for the crowd. At the table short, witty and appropriate talks were made by Mayor Phelan, Col. Frank Sullivan, Senator Brauhart, Mr. Hutchinson, Mayor Eaton and Mr. Druffel. There was a general expression to the effect that the League had entered upon a career that would surely

bring great and beneficial results to the municipalities and to the people. The new associations formed by those present at the convention would in many instances be lasting, and the friendships established would continue for years to come. A feeling prevailed that the convention just ended was productive of much good, and the future outlook gave promise that still greater benefits were in store.

The final adjournment took place with an expression of thanks to Mayor Phelan for his bounteous hospitality, and hopes that all and more would share it again a year hence.

### The Song of the Cities.

Hand in hand let the children go,  
Forming a long unbroken row;  
Swing and join as we gaily sing,  
Join at the ends till we form a ring.

A ring? A ring? What kind of a ring?  
A ring for right is the ring we sing,  
A ring to form a counter-ring  
To the ring that the politicians sing.

Then down with the bosses and all their tribe,  
And down with the man who will take a bribe,  
And down with the "rake off" and all such thing,  
And down with the "pull"—is the song we sing.

No city or town of the Golden West  
Is willing to rest till it gets the best.  
We vote our gold and we vote it free;  
As recompense

You must spend with sense  
And honesty and economy.

We want no botching or thieving raw,  
We want no cousins or brothers-in-law;  
We want the fit and only the fit,  
And we'll fight till you see that we get the fit.

Break up the dance and the phalanx form;  
Solid impregnable, firm unite,  
Flying the banners of reform,  
Marching straight into the thickest fight.

Phelan, Marx, Eaton, York, Sorrensen,  
Hunt, Druffel, Morse, Sweet, Winter, Snow,  
Mosher, Maher, Watson, Robertson,  
Moore, Lamborn, Lewis, Mullen, Rowe,  
Franks, Canfield, Beasley, Briggs, Francee,  
Mason, Oberdeener, Breed, Kirkbride,  
Walsh, Albin, Spinney and Kennedy,  
"Cinch" Finch and Johnson of Riverside,  
Crumpton, Turner, Byington, Bennett, Hale,  
Gilpin, Helmes, Brainard and Parkinson,  
Stoddard and Barcroft and Reininghaus,  
Hanscom and Richards and Hutchinson.

So the dance turned phalanx sweeps along,  
Keeping step to the throb of the swelling song.  
Be sure that you know just what you want,  
Be sure just what you want is right;

Go slow! Go slow!  
Be sure you know!

Then fear not threat and heed not taunt,  
Move right on the capital in your might,  
And get there so.

Mateo, Diego and San Jose,  
From the Lake to the ocean breeze;  
Clara and Rosa and Barbara.  
And all of us Angeles.

Modesto gives us the big bass horn,  
And Fresno the Spinney thrills,  
And Hutch plays the Palo Alto horn,  
While Phelan foots the bills.

We come from the North, South, East and West,  
From the mountain to the sea,  
And we do not rest till we taste the best  
At the city of Jim Phee.

# California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.  
B. F. LAMBORN, - - - - - Business Manager.

Office of Publication, Room 14, Eighth Floor, Mills Building, San Francisco, Cal.

Subscription Price, - - - One Dollar a Year.

The second annual convention of the League of California Municipalities was a success. The attendance was all that could be expected, while the interest shown in the proceedings exceeded all anticipations. We have yet to hear an expression of disparagement concerning the League and its work. Not only are the city officials enthusiastic in their appreciation of the possible good that the organization can accomplish, but the unofficial citizen is likewise interested and feels that a step is being taken in the direction of securing for citizenship the betterment of municipal conditions. The press treated the convention liberally and gave excellent reports of the proceedings and all over the state the newspapers have taken editorial notice of the new movement and bestowed upon it words of encouragement and cheer.

The convention is now over with, but the work of the League will go on throughout the year. Already some progress has been made by the special committee appointed to frame a new street improvement act has made substantial progress and the committee on uniform accounts has commenced its investigations.

The convention made a happy selection for President in Mayor Snow of Oakland. His interest in the organization is keen and he proposes to devote some of his store of energy and ability to forwarding the work of the League.

The retention of Mr. Hutchinson and Mayor Phelan on the executive com-

mittee insures that "forward march" will be the order of the day.

The League has now forty cities on its membership list. Within the next three months we hope to see forty more enrolled.



This office is in receipt of a complete set of blanks, specifications, etc., relating to street work, from C. W. Finch, Superintendent of Streets of Riverside. Finch is a man after our own heart and takes pride in his work and all things municipal. We trust that in the event of a new street law being adopted, Mr. Hutchinson's suggestion will be adopted, and that said act be named the "Finch Cinch."



The inauguration of the city government of San Francisco under its new charter has taken place with but very little friction, and all departments appear to be working in harmony. The appointments of the members of the various boards and commissions made by Mayor Phelan have been met with general public approval. There is no question but that there will be a marked improvement of the public service under the new administration.



By an oversight the name of the author of the "Song of the Cities" has been omitted. Anyone who is aware of the poetic temperament of one of the prominent delegates to the recent convention will recognize that none other than "J. H." penned the catchy lines. If there is anything wrong about it, blame the editor who refused the author the opportunity to correct proof.



This magazine is being largely supported by its advertisers. Municipal officers can aid the magazine by patronizing them in preference to those who are not aiding this movement. Please bear this point in mind.



## What the Cities are Doing.

Monrovia is to have electric lights.

Gilroy has adopted a municipal code.

San Rafael is to have a new city hall.

Santa Barbara will modify its ordinances.

Fresno and Auburn are investigating sewage disposal methods.

The new municipal light works at Palo Alto have been started up.

The new city officials of Santa Barbara were installed on January 2nd.

Paso Robles is engaged in the work of beautifying the city by planting shade trees.

Yreka will vote on the matter of issuing \$70,000 of bonds for water works on February 8th.

The San Francisco bond elections on December 27 and 29 resulted in the carrying of all projects.

Pleasanton has voted to issue bonds to the amount of \$20,000 for the purpose of constructing water works.

San Diego has concluded the purchase of the Hazard site for the new Carnegie library and the gift of \$50,000 is now secured.

Stockton is considering the subject of various municipal improvements, the aggregate cost of which will approximate \$400,000.

A movement to issue bonds to erect a library building has been started in San Jose, and has the endorsement of Mayor Martin.

A movement is on foot at Pacific Grove to remove some of the restrictions against business and amusements that now exist in that place.

It has been decided to institute a test suit in order to determine the validity of the recent Los Angeles water bond issue before offering bonds for sale.

Progress is reported in the matter of Oakland's proposed bond issue for a variety of public improvements to cost a million and a quarter of dollars.

The Visalia *Delta* is engaged in the work of numbering the houses of that city, on a plan that should commend itself to other enterprising newspapers.

Oakland has now fulfilled all the conditions accompanying the gift of Mr. Carnegie of a library building, and that gentleman has notified the authorities to draw on him for \$50,000.

The sewer bonds of Ferndale, to the amount of \$12,000, have been sold to E. H. Rollins & Sons at a premium of \$202.80. Bids for the construction of the sewer will soon be advertised for.

Livermore will soon be provided with electric lights. The plant is now being put in by the Livermore Gas Company. A 50-horsepower Union gas engine will furnish the motive power.

The annual messages of Mayor Eaton of Los Angeles and Mayor Land of Sacramento are comprehensive reviews of the work of their respective municipalities and contain suggestions of value.

The *Healdsburg Tribune* recently published an extensive description of the water and light system which is now nearly completed. The matter is very valuable and sometime will be made use of in this magazine.

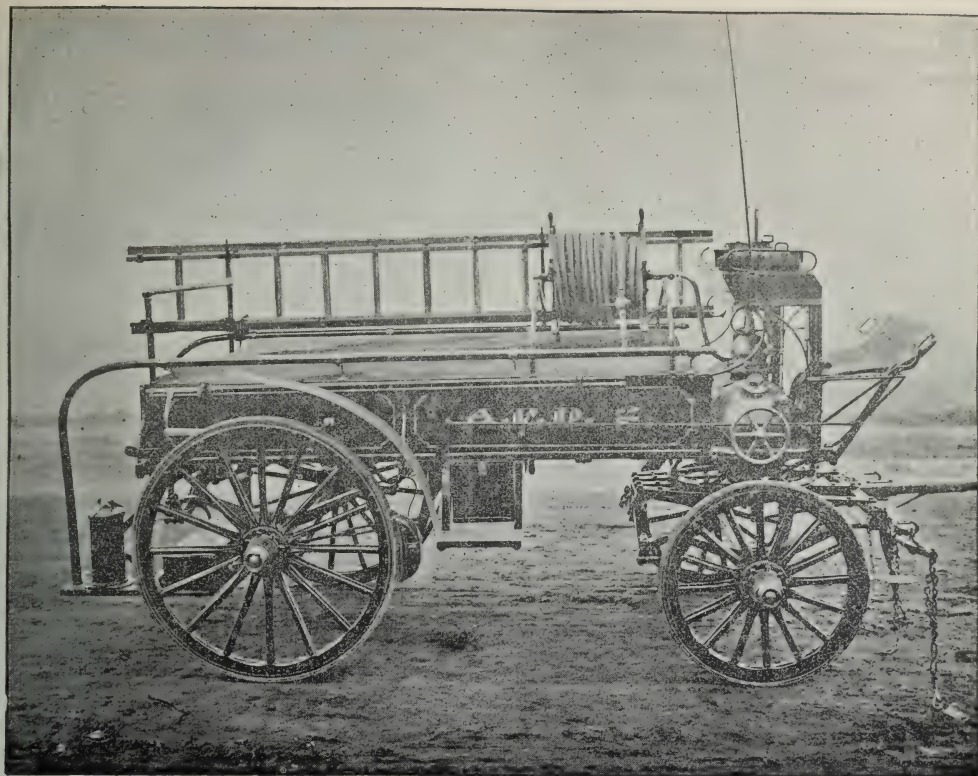
The sewer farm of Pasadena has been quite a profitable institution this year. The total receipts from walnuts, wood, alfalfa and hogs amount to about \$4,500. The expense of conducting it will be about \$2,300, leaving a profit of over \$2,000.

The well tests, conducted by the Citizens Water Committee with a view of securing for the city an adequate supply of clear water for Sacramento, have progressed satisfactorily, and such wells as are now existing will supply 4,000,000 gallons a day.

Healdsburg's new electric light meter rates have been adopted and are graduated from 10 cents per kilowatt, where the amount supplied is in excess of 450,000 to 1,000,000 wats, to 20 cents per kilowatt, where the quantity consumed is less than 50,000 watts.

The injunction that for several years past has prevented Santa Cruz from paying its bonded debt, has at last been dissolved and the money that has been tied up has been paid. The city is now in good financial condition, and the bonded debt is less than \$200,000.

Sacramento Trustees have a committee at work investigating the matter of erecting a municipal lighting plant; also to look into the subject of the city constructing an underground conduit for all electrical wires, the city to lease the same to the telephone, telegraph and other companies. The committee consists of Trustees Devine, Dolan and Paine.



For the past three years Chief Fred K. Krauth, of the Alameda, Cal., fire department has been urging the breaking up of a double 35-gallon tank chemical engine owned by that municipal corporation and building from it two combination chemical engines and hose wagons, "thereby," as he said, "increasing the fire fighting apparatus of the city by two hose wagons and one chemical engine." After many backsets, from various causes, the efforts of the Chief were crowned with success, and on the 4th instant the first of the combination wagons was received by the city from the builder, James Kenney, 321 Eighth St., Oakland, and placed in service at the Webster street fire quarters. The second wagon, which is now in the paint shop, will be turned over to the city by the builder next month, thus completing a large and much needed addition to the fire department rolling-stock of one of the most progressive cities on the Pacific Coast.

This model combination chemical engine and hose wagon is built from plans and specifications drawn by Clarence R. Weymouth, of Alameda, and is a credit to both designer and builder, as an inspection of the accompanying illustration will show. Each wagon is supplied with a 35-gallon chemical tank, which is placed beneath the driver's seat and can be readily operated by him without dismounting, and connected with a hose-reel in the rear of the driver's seat which carries 200 feet of  $\frac{3}{4}$  inch rubber chemical hose. The capacity of the body of the wagon is 1500 feet of  $2\frac{1}{2}$  inch cotton hose (without crowding) and 18 inch lining-boards on each of the inner sides of the body keeps bolt heads and nuts from wearing out or catching the hose. On a 10x10 inch box in the center of the driver's seat is an 8-inch headlight and brass hand-lanterns are hung on either side of the seat-risers. Under the center of the wagon bed, and between the side step hangers, is a box for soda-holders, nozzles, etc., and in front of the rear step (which is 6 feet 4 inches by 16 inches) is the jockey-box for spanners, wrenches, etc. Extending from the forward end of the wagon body to the rear step is a 1-inch iron pipe hand-rail, mounted on brass brackets and finished off with polished brass acorns at the ends. On the near side of the wagon, on wrought iron brackets, is a 22 foot extension ladder of good quality and fine finish, while a 14-inch striking gong (brass) on the front footboard and an acid holder on the rear footboard completes the equipment.

The wagon is also furnished with 2-inch Grant roller axles, Archibald wheels with 2x3-4 inch Gautier steel tires, and the best quality of Betts Co's springs, making, as a whole, one of the most substantial and complete fire-fighting outfits ever put into service on this coast. It is



the intention of Mr. Kenney to be a competitor for all fire apparatus on this coast, and to construct the same with regard to the local requirements of each municipality. The materials will in all cases be of the best quality combined with high class workmanship. Municipal officers desiring anything in this line would do well to correspond with him, and also inspect the work already turned out. Chief Krauth and Alamedans generally are to be congratulated on this latest acquisition to their fire department. The Chief is always on the lookout for new and good improvements for his department, and was the principal mover in getting for Alameda the first hose wagon that ever came to this state.



### Personal.

E. B. Crawford has resigned as City Attorney of Gilroy.

E. C. Farley has been appointed Recorder of Los Gatos.

F. W. Gabriel has been appointed City Clerk of Suisun to fill the vacancy caused by the death of O. B. Powers.

### Vrooman Act Constitutional.

The Vrooman and street bond act has been upheld by Judge Fitzgerald of the Los Angeles Supreme Court in a decision rendered in the case of the German-American Savings Bank vs. Ramish & Marsh, in an application to enjoin the defendants from an execution under a bond sale.

The main point of the decision is in holding that the laws under which the street work was done, the Vrooman Act and the bond law, are constitutional, the plaintiff basing his defense chiefly on the claim that they are in violation of the principles of both the state and the federal constitutions. As it stands now, the decision strengthens the validity of all street bonds, though an appeal will be taken to the Supreme Court, which must be awaited before the questions involved can be considered as settled.

### C. E. Moore, C. E.

(Mem. Am. Soc. C. E.)

**Consulting Engineer** for Water Works, Pumping Plants, Electric Lighting Plants, Sewerage Systems, Steel Construction.

Home Address, Santa Clara, Cal.

## Gas and Oil Engines

— FOR —

### City Water Works

AND

### Electric Lighting Plants,

BUILT BY THE

## Union Gas Engine Co.



306 HOWARD ST.,

SAN FRANCISCO.

Send for catalogue, stating requirements.

## Enameled Street Signs

STREET NUMBERS, ETC.

Neat,

Durable,

Cheapest

In the end.

Send for samples.

San Francisco

Enameling Works,

1741 MARKET STREET.

# CALIFORNIA MUNICIPALITIES

VOL. 2.

San Francisco, February, 1900.

NO. 1.



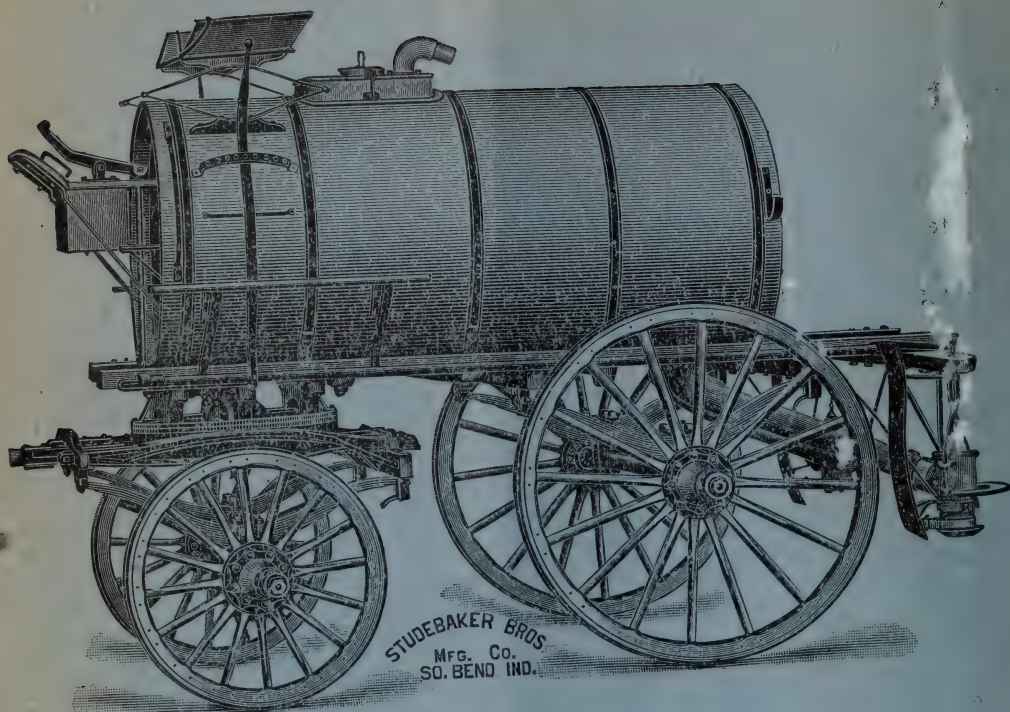
MUSEUM AT GOLDEN GATE PARK, SAN FRANCISCO.

## In This Number

Experiences of Cities with Municipal  
Water Works.

"A Continuing City," by David Starr Jordan.





Studebaker  
Automatic Sprinkler.

This is the season of the year for municipal officers to place an order for a new sprinkling wagon for summer service. We hope to have the pleasure of furnishing you with what you need.

Studebaker Bros, Mfg. Co.  
Market & Tenth Streets,  
SAN FRANCISCO.

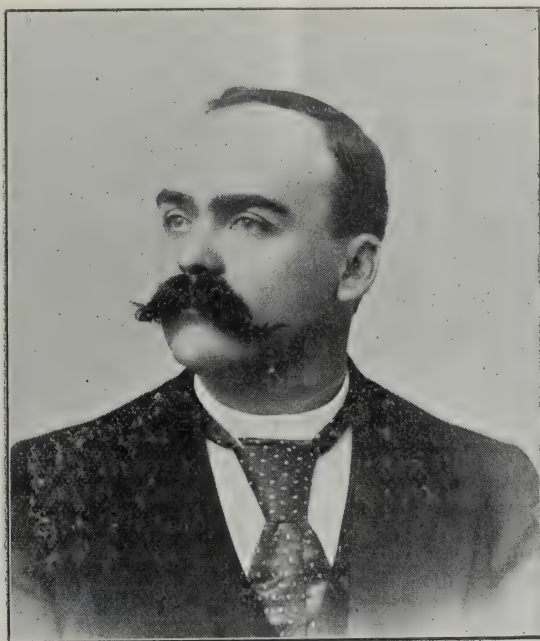
# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. I.

San Francisco, Cal., February, 1900.

No. 7.



J. S. SWEET, MAYOR OF SANTA ROSA.

## Experiences of Cities With Municipal Water Works.

[A continuation of the proceedings of the Second Annual Convention of the League of California Municipalities, held at San Francisco, December 13, 14 and 15, 1899.]

### Santa Rosa's Experience.

MR. RICHARDS—The convention will come to order. We have as the subject for our consideration this afternoon, "Experiences of Cities with Municipal Water Works." There are a number of papers to be presented on that subject. Mayor Carr, of Nevada City, is not present at this moment, I believe. We will

therefore hear from Mayor Sweet, of Santa Rosa.

MAYOR J. S. SWEET, of Santa Rosa.

*Mr. President and Gentlemen of the Convention:* I have not had time to prepare a paper, but will endeavor to give you a short outline of the experience of Santa Rosa with its present system of water works.

Some seven or eight years ago, on ac-



count of the scarcity and quality of the water furnished by the Santa Rosa Water Works Company, a private corporation, many of the people of Santa Rosa thought it time that the city should acquire water works of its own. The subject was agitated and an election to authorize the issuing of bonds to the amount of \$165,000 was carried by a vote of about three to one. The services of one Monjeau, an expert on water systems were secured, and his plans adopted. To market the bonds was the next problem encountered and which proved to be the most difficult on account of the financial stringency and the threatened and pending litigation at that time.

Taking the matter into their own hands, the then mayor and city council entered into a contract with Mr. Effey of Santa Cruz, as I understand it, to sell him the bonds at par and to give him the contract to construct the water works for the same amount. Mr. Effey sublet the building of the works to one Perkins and for the most part, a good system of distribution was laid, wells were dug and pumps started. Eight or ten wells were dug, some of them flowing wells where the water would flow out of the top, but it was soon discovered that they would not furnish sufficient water for the city. People attached to the city system so rapidly that it was soon discovered that more water was needed. The next administration came into power about this time and sunk a shaft forty five feet deep and begun tunnelling to the south securing quite a substantial flow of water. During the two years management the output was increased until there were some seven or eight hundred families using city water. Since the present administration has taken charge of affairs, some four or five hundred feet of tunnel has been completed and the output of water increased to about a million gallons per day. The flow is steady from the forty five foot stratum and does not perceptibly decrease during the dry season. I

think that the lowering of the tunnel four or five feet would double the present capacity of the supply which increase is very much needed.

During this time, I think there have been brought against the city some eight or nine suits, injunction and otherwise, which were efforts to prevent or delay the acquisition of a municipal water system. All were decided in favor of the City, the last decision coming from the Supreme Court in the case of Wesley Mock vs. City of Santa Rosa and the original Mayor and Council who started the works. The suit was brought before the old council was out of office, and has been dragging along in the courts for four or five years. The decision gives the works to the Mayor and City Council of Santa Rosa to be held in trust for the people of said City and for their use. The costs of the suit falls upon the original Mayor and Council together with the treasurer and his bondsmen.

The decision also states that an accounting shall be made, and the difference between the value of the water works and the face of the bonds shall stand as a judgment against the old mayor and council. The opposition claimed that a considerable amount of money had been squandered, thrown away, or had disappeared in some illegal manner, that the water works had cost only \$120,000 and the face of the bonds in the trade was about \$161,000, and that \$40,000 had disappeared. I think very few people in the City of Santa Rosa believe that the old board pocketed a single dollar of that money. But through their eagerness to accomplish what nearly the whole city was clamoring for, city water, they made the mistake of trading the bonds as they did. This act the court holds as illegal and consequently the judgment stands against them. The question will be of course, whether the "value" of the water works means the original cost, or what the works are worth today. You can find plenty of people in Santa Rosa

who will say that the value of the water works is twice the value of the face of the bonds issued. In fact, the people of Santa Rosa could not be induced to sell the water works for \$500,000, for the very reason that they are now getting free water, and have been getting it for the last five years. We do not charge the citizens of Santa Rosa one cent for their water, and they have all the water they want for domestic purposes and irrigation of their lawns and flowers though not for the irrigation of vegetable gardens.

I think one of the main faults with the present system is that some regulation was not adopted in the first place against the misuse of water. We are pumping now, during the summer season, over a million gallons per day. Some of the time, the engineer has figured we have pumped a million and a quarter gallons per day. If some regulation had been adopted as to the use of water, a great amount of waste that we now have would be avoided. It is costing the city today an average of about \$500 per month, the whole expense of pumping the water.

It seems that we are not yet through with litigation. A short time ago the old water company brought suit in the Federal Court to enjoin us from furnishing free water to the citizens of Santa Rosa. What the outcome of that will be, I do not know. Of course, we are going to fight for free water as long as we have anything to fight with. The people like it, and they will not be satisfied with anything else. I think that ultimately every young city should strive for free water, and plenty of it. There is no question but that the majority is nine to one in favor of free water in Santa Rosa.

A DELEGATE—I would like to ask what the population is that received water with you?

MAYOR SWEET—We have between 1100 and 1200 tappings now, with an average of perhaps six or seven to the tapping, and maybe it will average

higher than that. I think all of the city, with the exception of a few friends of the old water works, take the city water. There are a few places that the pipes do not reach, but the system will be extended, as soon as the litigation is finished, and be made complete.

A DELEGATE—The gentleman speaks about paying for it by the city. I suppose the water is paid for by direct taxation, is it not?

MAYOR SWEET—Yes.

THE DELEGATE—How much does that increase your rate of taxation?

MAYOR SWEET—We have to put 25 cents on a hundred dollars into the sinking fund to pay the bonds and the interest on the bonds each year. Two years ago it was 28 cents, this year it is 25 cents. We hope next year to lower it some, the amount of bonds being reduced each year, of course making the interest a little less.

MR. HALE—Do the bonds run forty years?

MAYOR SWEET—The bonds run forty years.

MR. HALE—I would like to inquire how much the \$500 a month expense of maintenance, adds to the tax rate?

MAYOR SWEET—It is \$6,000 a year on an assessment roll of four million dollars. This is paid, of course, from the general fund.

MR. SORESENSEN—I understand that the value of property in Santa Rosa is four million dollars?

MAYOR SWEET—Yes sir.

MR. SORESENSEN—And that the water entails an expense of \$6,000 a year, or in other words, 15 cents on the \$100 of taxation?

MAYOR SWEET—Yes.

MR. SORESENSEN—That is cheap enough. Everybody ought to be satisfied to get their water without paying any more for it than that.

MAYOR SWEET—We have reached the limit, as the charter compels us to limit the rate of our taxation to one dollar, we cannot go above that. Litigation depleted our treasury to a great



extent up to two years ago, and at the time I took office we were in debt somewhere about \$7,500, I think. During the last year and a half we have paid up all of our indebtedness, and we now have about \$32,000 on hand to keep us until the first of next May. As the financial statement shows, we have about \$5,000 a month to expend so we should get through all right.

MR. SORENSEN—What is the city tax rate?

MAYOR SWEET—The city tax rate cannot be higher than \$1.25 on the \$100, which includes the payment on bonds falling due and interest on bonds.

THE CHAIRMAN—Mayor Lamb, of Santa Cruz, not being present, we will next hear from Mayor Druffel, of Santa Clara.

#### **D. O. Druffel, of Santa Clara.**

Mr. Chairman and Gentlemen of the Convention: Before proceeding to tell you something of our experience with municipal works, I desire to express my gratification at the large attendance we have here today. I feel particularly gratified, because I was somewhat instrumental in the organization of this League, and am, of course, very anxious to see it a benefit to the people of our State and a great success.

I presume I am expected to deal only with the experiences of Santa Clara in what I shall say to you upon the topic under discussion. The experience of Santa Clara is that municipal water is a tremendous success. In fact, our water works have been a success, financially and otherwise, from the start. We were compelled to go into municipal ownership by reason of the fact that the water company supplying us also supplied a neighboring city, and we were at a distance from their pumping plant and their reservoirs, and we could not get a sufficient force to be of any service to us in case of fire. Privately no one seemed to be willing to hazard his money in putting up a system, and so

we bonded the town for some \$60,000 and constructed the works.

Our system is a pumping system. We have about half a dozen wells, of a depth of from 300 to 500 feet. Our pipe system covers some fifteen miles of pipe, the area of our town, for the number of its inhabitants, being extremely large—we cover, I think three square miles of territory. Our plant cost us, calculating all of the expenses, somewhere about \$56,000, and it has been in operation about five years. It costs about \$300 a month to run our plant, and we pump all our water. It is not quite as expensive to pump water as some people are liable to try to lead you to believe. Fuel is cheap in our country, and that aids us. When I say the expense is \$300 a month, that does not include interest on the money invested.

We pump from 400,000 to 500,000 gallons of water every twenty four hours. We supply from six hundred to six hundred and fifty consumers; that is to say we have that number of connections. Our rates are very reasonable. Our total income from water consumers amounts to about one dollar apiece. We take in from \$650 to \$700 a month. Presumably with the intention of increasing the population of the city, the Board of Trustees has made no large rates, nor have they charged anything additional on large families, as is the custom of some water companies. They do not charge for bath tubs and such things as that. We have run our business with very little expense. Our wear and tear account, or expense of keeping up the plant, has been exceedingly slight. The machinery that we purchased originally was of the best character. And our experience up to date is, that \$25 a month will cover all the wear and tear on the plant.

As I have stated, we have an income of about \$650 to \$700 a month. After paying our expenses, this leaves us a little over \$4,000 per year, and the interest on our bonds at the present time amounts to about \$2,700 a year. So we

have enough money left each year to pay for \$1,500 worth of bonds. In addition to this, we get all of our water for municipal purposes free. We used to pay about \$200 a year to the San Jose Water Company for water for sprinkling streets and flushing sewers, etc. We now use about four times as much water for the same purposes, and it does not cost us a cent.

Our experience with municipal ownership has been a success principally for the reason, I believe, as Mayor Phelan stated yesterday, that we use the initiative and referendum provided by the new charter of San Francisco. We have no such provision in our charter, for our charter is so old that I do not think such a thing was ever heard of when it was framed, but the people of our town are all interested in everything which concerns the town, and they assume the initiative and compel a referendum. And any board of trustees that does not run the water works in a satisfactory way, is sure to be let out of office at the next election. I think that is the principal reason why we have been successful.

The San Jose Water Company made quite a fight against us for a time, but the people were so interested in the success of the municipal system, that very few of them patronized the San Jose Water Company, and about a year and a half ago the San Jose Water Company came to us and asked us to supply the consumers that they were then supplying, stating that they desired to remove their pipes from the town. This we allowed them to do, of course, and even went so far as to fill up the ditches after them when they had taken up the pipes.

After the construction of our water works, we had a few thousand dollars left, and, putting that with a small sum of money which was in the general fund, we started an electric lighting system for electric street lighting. We operate some forty-six lamps there, of 2,000 candle power each, and the peo-

ple are also very much pleased with the success of that proposition; so much so, in fact, that on September 20th last, they voted bonds to the amount of \$30,000, by more than the required two-thirds majority, and that amount is to be expended in the installation of a municipal gas plant for the purpose of supplying the private houses of the town with artificial light. (Applause).

MR. RICHARDS—We will be glad to hear now from Prof. Marx, of Palo Alto, upon the subject. Prof. Marx is next upon the program.

### Professor C. D. Marx, of Palo Alto.

Mr. President and Gentlemen of the Convention: The town of Palo Alto has been wise enough to profit from the experience of other cities somewhat; it ascertained what its water works would cost before it voted bonds for them, and followed the example of Santa Clara in choosing a competent and efficient engineer to make the plans.

Palo Alto is a small town, and the need for water was perhaps felt more there than in the average California towns, because it is a "dry" town. The Board of Trustees found it necessary to take steps at once to procure a suitable water supply, the citizens having supplied themselves with water up to the time of the incorporation of the town, with the assistance of two or three small plants. The feeling was at once very strong in favor of municipal ownership, but there was some difficulty as to the method of getting at it. Bonds were almost unanimously voted for the municipal plant, but the little bit of a corporation already supplying water there made it almost impossible for us to sell our bonds, and for a long time we were unable to carry out the wishes of the people. We finally succeeded, however, and in July, 1897, the plant went into active operation. Like the plant at Santa Clara, it is a pumping plant. The wells are located on the low ground, so that it is possible to so place the pumps as to get a sufficient



suction lift. We have about ten or twelve miles of cast-iron pipe, with a hydrant system of about fifty hydrants, the hydrant pipes in every case being not less than six inches in diameter, thus giving us excellent fire protection.

I have gone to some pains to take from the books of our treasurer, figures showing the actual operation of the plant, as regards the cost of construction, operating expenses, interest, and bonds.

Unfortunately municipal accounts in California, as in most places, are not kept in such a manner that it is possible to separate clearly the items which ought to be charged to the different works belonging to the town. I have, however, made the best division that I could, and the following table will show the result of operations from July 1, 1897, to December 1, 1899.

PALO ALTO WATER WORKS.

Period.	Revenue.	Operating expenses exclusive of cost of collecting & bank'g.	\$40000 at 5 per cent. Bonds & interest.
July 1, '97, to Dec. 31, '97	\$ 2234 40	\$1367 14	\$
Dec. 31, " " " " '98	5918 96	2438 89	4929 18
" " '98 " July 1, '99	3468 40	609 62	950 00
July 1, '99 " Dec. 1, "	3350 40	1863 63	1950 00
	<u>\$14972 16</u>	<u>\$6279 28</u>	<u>\$7829 18</u>
	14108 46	7829 18	
	<u>863 70</u>	<u>14108 46</u>	

The operating expenses from July to December 1899, include cost of fuel for a good part of next year, so that on January 1, 1900, there will be on hand at least \$750 worth of fuel already paid for. Making allowance for this, and estimating income and expenditures for

December, 1899, and including under "bonds and interest" the \$925 due January 15, 1900, and under operating expenses \$600 for collecting and book-keeping, we then have the following showing:

Period	Revenue	Operating & ex. collecting	Collecting	Bonds and interest
July 1, '97, to Dec. 31, '97	\$ 2234 40	\$ 1367 14	\$120 00	\$
Dec. 31, " " " " '98	5918 96	2438 89	240 00	4929 18
" " '98 " July 1, '99	3468 40	609 62	120 00	950 00
July 1, '99, " Dec. 1, '99	3350 40	1113 63	100 00	1950 00
Estimated	Estimated	Estimated	Actual	Due Jan. 15
Dec. 1, '99, to Dec. 31, '99	500 00	200 00	20 00	925 00
	<u>\$15472 16</u>	<u>\$ 5729 28</u>	<u>\$600 00</u>	<u>\$8754 18</u>
	15083 46	600 00		
		<u>8754 18</u>		
	<u>\$ 388 70</u>	<u>\$15083 46</u>		

For the 30 months ending with Dec. 31, 1899, the water works shows an actual cash balance of \$388.70. So far, however, we have failed to credit the water works fund with the water used

for street sprinkling. At 15 cts. per 1000 gallons, the amount we were paying a private company before the works were constructed, this water for street sprinkling would have cost us

From July 1, '97, to July 1, '98.	\$900
" " " '98, " " " '99.	750
" " " '99, " Dec. 31, '99.	425
	<hr/> \$2075

Including street sprinkling, we have therefore not only furnished water to the citizens which is good in quality, ample in quantity and under satisfactory pressure (40 lbs.), but we have actually saved \$388.70 and \$2075 equal \$2463.70.

The above balance is correct if we consider our supply merely a domestic supply, but if we look into account the fire protection afforded to the town; a still better showing is made. No private company would furnish to the town the fire protection we now have for less than \$20 per hydrant per annum. As we have fifty hydrants, three of them double, and not one fed from a pipe less than six inches in diameter, the fire protection would cost the town at least \$1000 per annum additional. For the two and a half years the plant has been in operation; this would amount to \$2500. We are justified in adding this amount, the \$2463.70, to those we have: Amount actually saved to the taxpayers in the two and a half years of the plant's existence, \$4963.70.

But there is another saving. The town has just finished a sewer system. The water needed for flushing would be quite an item of expense, if we had to purchase it at the customary rates from a private company.

It will be fair to subtract from the amount above obtained, the interest and depreciation on cost of extension to date, \$2151.94. The extensions are an average of about one year old. If we allow 15 per cent of \$2151.94, \$322.79 for interest and depreciation, and furthermore, 5 per cent on \$673.55, the amount the works cost over \$40,000, for thirty months, or \$84.19, we have additional charges of \$322.79 and \$84.19, \$406.98. Deducting this from \$4963.70, we have \$4556.72, which you can credit

to our water works system. I think that is a good enough showing for a small town in that short space.

We now have 371 consumers, with 37 services metered. In that connection I would like to say a word. I confess that I differ most decidedly from his Honor, the Mayor of Santa Rosa, upon the proposition that it is fair to the tax payers or to the community to furnish free water. We furnish it at a reasonable price, at cost, and it seems to me that that is the only way in which a water works should be run. It is a business proposition, and we, as trustees, must look at it from that point of view. So I think that if we have made a mistake, the only mistake is in not metering the whole system. Our endeavors tend in that direction now, and that will be done.

There is another point. I think we made a mistake in not putting a meter on our pumping plant. Meters of that kind can be had for a reasonable sum, and if that were done, we could determine much more accurately than we can now what it actually costs us to pump the water.

One more word about metering the system. That will only lead to a fair distribution of the water. I believe this excessive waste of which Mayor Sweet complains, will be done away with, in that event, and water will be furnished at rates no higher than those at which it is now being furnished.

Like his Honor, the Mayor of Santa Clara, I feel a little proud to be able to say that since we have put in our water works plant, it has been such a success that we have put in a sewer system, and are just about to put into operation, a municipal lighting plant which is to furnish both street and incandescent lamps. And because we are doing this, I wish to call the attention to the necessity of keeping separate accounts. Municipal accounts should be kept in a much better and clearer way than is the case at the present time.

I thank you for your attention.



MR. SORESENSEN—I have been in San Francisco for several days and have been among the pump men to find a meter of the kind that Prof. Marx speaks of, large enough to measure the entire supply pumped. We in Modesto need a meter for our town plant, and I should like to know where such a one can be found.

PROF. MARX—You can get one of the East Providence Iron Works, Providence, Rhode Island. They manufacture the Ventura Water Meter, which I think is the simplest and best made for the purpose.

MAYOR SWEET—I do not want it understood that I am in favor of free water for everybody and all you want to use. That is not the point at all. As I said in my remarks, we are trying to find some way by which to remedy the mistake that has been made by the original Council in adopting that system. Where people have had a taste of free water, however, it is a difficult thing to make changes. If any city council should now attempt to charge water rates in Santa Rosa, it would be political suicide, to say the least. But we do want to put some plan into operation that will regulate the use of water. We have some meters, and we have been putting them on at the livery stables and laundries and on the brewery, I believe, to show how much they are using. We found that one livery stable used five hundred gallons a day and another twenty-five hundred gallons, indicating a great variance.

We have a plan that I will state, and I would like to have it criticized, and that is this: While the citizens of Santa Rosa are heartily in favor of free water to a certain extent, and there would be a big hue and cry if we should ever attempt to make a straight rate, as they do in other places, we have thought it would be a good plan to put on water meters on all of the consumers pipe and give them a certain amount free. We will give them all they need to use for domestic purposes, and per-

haps a little extra to put upon their lawns and flower gardens, because you know we are a great flower country up there. Then everything above that we will charge them for. In that way we could tell just who was wasting the water, and, after they had used a certain amount per month and per day, they could pay for the overuse. I will be glad to hear any criticism upon it, if there is any to be made.

THE CHAIRMAN.—The question of municipal ownership of water supply is now open for general discussion. We would be glad if the Convention will take the matter up and discuss it at length. I would like to hear from Mr. Sorensen, of Modesto, who has, I understand, a lot of valuable information to give us.

#### Mr. Sorensen, of Modesto.

*Mr. President and Gentlemen of the Convention of California Municipalities:*

If I understand correctly the aims and objects of this and former conventions of a like kind, then I feel satisfied in saying "up visors." Gentlemen, that you and I may know one another, and without any further waste of speech, allow me to proceed with the subject that is now upon mind. That you may know who I am, let me briefly tell you that I represent the "city of Modesto," and as such representative, I stand before this great convention for the purpose of giving you a brief but concise outline of the doings of our municipality, as it has been carried on by my predecessors and the present Board of Trustees, of which I have the honor of being a member.

As the representative of one of the few municipalities owning and operating its own system of water works, for the purpose of supplying its inhabitants with a good and sufficient supply of pure and wholesome water, for domestic and ornamental (irrigating) purposes. I presume that you expect from me an outline of my experience, so far as my limited knowledge will permit, in regard to the benefits derived from,

or the burdens imposed upon, the citizens of our municipality, so far as the supply of municipal water is concerned.

That one and all may know why Modesto is at this time the proud possessor of a system of water works second to none so far as conditions permit, you must allow me to go back a few years, in order that others may know what caused us to take the important step of procuring for and supplying the municipality with that great commodity, "water." As far back as 1889, many of our citizens foresaw the necessity of unity of action in regard to our water supply. An election was called in Aug. 1889, for the purpose of voting bonds for the erection of municipal water works, but was defeated by a heavy majority for a good many reasons, all of which may be interesting to representatives from municipalities having no water system of their own. Pardon me and I will be brief.

Prior to 1893, the great majority of the people of Modesto received their supply of water from a private corporation, and at reasonable rates. The water supplied was generally supposed to be good and wholesome, so on that score there were grievances from but few. The owner of the private corporation was a widow, a Modesto girl, whose all was at stake in the water works, which was located in the center of the center business block in our city.

Many people at and after the first election claimed and advocated that the water supplied was not wholesome because of its close proximity to the main business part of the town. It was claimed by some that the sewage of that part of the town, having no other outlet, found its way into mother earth and contaminated the water of the wells from which the city received its supply. Others advocated and claimed that the plant was located in one of the most dangerous portions of the city, so far as fire was concerned, and that in case of a heavy conflagration in the business portion of the city, the water works, be-

cause of its height and inflammable material, would be a target for the flames.

Others, again, as is always the case, claimed that the supply was entirely insufficient for the growing need of the people. It was also claimed that, because of the dangerous location of the works and because of the insufficient supply of water, the fire insurance companies had raised their premiums to such an extent that insurance became a luxury and not a matter of business protection.

Again, the municipality was heavily mulcted for water for street sprinkling and for fire purposes, in fact to such an extent, that only the streets within the business blocks could receive any water to compete with the dust of our dry climate, and such a thing as a drill of our hose company was out of the question.

Many of our people strongly favored a modern sewer system for our city. It was needed; it could be built and at a small cost, but here again came the same argument, what is the good of a sewer system if you have no water with which to flush your sewer. It was said, you cannot afford to pay the price for water, charged by the water works; it will ruin us, and, on the other hand, our physicians said, if you do not sewer the city, you will die. The sum and substance of the argument of our people resolved itself into two propositions:

1 If you vote bonds and erect water works, you will kill the widow who owns the corporation now supplying us with water;

2 If you do not vote bonds, you will get up some morning only to find out that during the night you died of malaria, because of the lack of proper sewerage.

Two fearful propositions to behold, hence, in Nov., 1892, another election was called, and "*bonds, yes*," carried by a large majority.

The officers of the city went to work immediately; purchased 11 lots in the northern part of the city, 275x140 feet, upon which, during the summer of



1893, the water plant now belonging to the city was erected, at a cost of \$60,000. This plant consists of a 3-story brick building, 40x40 feet, 60 feet high, inside of which there is a heavy steel frame, upon which rests the four supply tanks, each containing 40,000 gallons of water. Back of the main building there is a substructure also of brick, wherein is located the boiler room, pump pits and coal sheds. The pump pit is 32 feet deep, with dimension of 18x24 feet in clear, having walls of concrete 4 feet in thickness. In this pit there are three 12" wells; each have a depth of 195 ft., and in this pit is also located two Hall's Compound Duplex Pumps 10"x16"x12" having a capacity of over 40,000 gallons per hour each, and of a million gallons per 24 hours. These pumps have 10" high pressure cylinder, 16" low pressure cylinder, 12" water cylinder and 12" stroke.

The boiler room is supplied with three Tubular Horizontal Return Boilers 16x54. One No. 4 Hooker Feed Pump, and one 60-horse power Otis Heater.

The pipe line consist of

1250	feet of	12"	cast iron pipe.
580	"	"	10" " " "
1700	"	"	8" " " "
7100	"	"	6" " " "
27000	"	"	4" " " "
26000	"	"	2" " " "

A total of 63,630 feet, or a little over 12 miles of pipe.

While the pumps are in motion, the water from the wells goes directly into the supply pipe, and the overplus finds its way into the supply tanks. The pressure upon the pipes normally, (or for domestic use) is 30 lbs. In case of fire, the pipes leading to the tanks are closed by a gate, and the whole supply from both pumps is forced into the supply pipe. This is generally known as the Holly System, and any pressure that the pipe and fire hose can stand can be obtained from 90 to 120.

We have on our pipe line 36 hydrants—12 Crane, 12 Single Fire and

12 Double Fire. Four of these have been put in place of late.

These hydrants, and the positions in which they are placed, offers the finest and best facilities for protection against fire. It saves hose and gives the "fire boys" the best of opportunity to quickly and most efficiently cope with and overcome any fire so far as experienced.

Again, the position of hydrants for street sprinkling have all been so placed that the driver of the sprinkling wagon, in making his usual round, has never got to drive with his tank empty. If he has a fair team, he can always, after he has had a little experience, get to a hydrant at the moment his tank needs refilling. This is of great saving. Our soil absorbs water very rapidly and dry seasons are long, and we have more or less wind that moves the dust at a great rate of speed. The composition of our streets and highways would soon become a mass of chuck holes during the dry season were it not for a plentiful supply of water, and when I tell you that we have, during the last season, put twelve million gallons of water upon our streets, you can readily understand the saving to the city,

1st, in the cost of water;

2nd, in the cost of street work did we not have our own water supply. We could, under no circumstances, afford to use the amount of water we do use, and did we not use it, what would become of our streets, and what would become of the merchants' goods, and what would become of family dwellings. Dust would have us in its clutches, because when the thermometer registers from 100° and upwards, it feels a good deal better to have windows and doors open than it would to have them closed.

Again, because of the fact that we have a municipal water system of some note, and of efficiency, the fire insurance companies are all treating us as kindly as a people can expect to be treated from corporations that carries you around in their vest pockets.

At the outset I referred to our sewer

system, one of the greatest commodities of modern time, and a commodity that people of any locality, fortunate enough to be possessed of it, would not part with it under any circumstance. We have as fine a sewer system as any city in the state, similarly located. We have

5000	feet of	16"	salt glazed sewer pipe.
2000	"	"	14"
2000	"	"	12"
3000	"	"	10"
17000	"	"	8"
40000	"	"	6"

Extension to main sewer, 1600 feet of 12" pipe. A total of 70600 feet or 13½ miles. We have 42 manholes, 64 inspection holes, and 6 flush tanks in the system. We discharge the sewage into the Tuolumne River one mile south of the city, and have all through the city a fine fall. 1600 feet from the river we have a drop of 18 feet and in the last 1600 feet of the pipe line we have a fall of 19 feet. The sewage is discharged into the river 12 inches below the surface of the water, measured at the time when the water in the river was the lowest ever known.

My reason for referring to the sewer system is because of showing you the benefit accruing to the people by reason of municipal ownership of water works. We flush our sewers regularly once per month, using as nearly as we can calculate for each flushing 250,000 gallons of water, or 3 million gallons per year. This of itself is quite an amount of water if it had to be bought from a private corporation, besides a steady flow of water through the pipe all day and night amounting to enough to fill a 6" pipe.

I will next touch upon the benefits of municipal water works in its relation to the beautifying of the homes, the growing of the shade trees along the line of street, etc. In our dry and heated climate no grass, flower, shrub or tree would grow, if we did not have a plentiful supply of water for irrigating purposes. With a plentiful supply of water our soil can and does produce

anything that can be produced or grown elsewhere in the world. Bear in mind, that this is not said for advertising purposes; it is brought out for the purpose of bringing as many of the benefits accruing to people of municipalities having a water system of their own, as it is possible for me to think of in the limited time at my command, for the purpose of bringing to the notice of people of municipalities having no water system of their own, the benefits we are receiving. It always has been, and it is now the rule in our city, to give everybody as much water as they desire for the beautifying of their homes at as small a cost as the different managements of the city has considered prudent, taking matters generally into consideration, and I am proud to say that, so far, the people have always had such water at nominal rates. Of course we experience some trouble with that class of people who infest every locality, and known as the "selfish"—too good a name for them—and they are hard to reach in a lawful way. They do not hesitate to use all the water they can get in any way that suits their purpose; they do not hesitate to use water given them for ornamental purposes, for business purposes, even when they are aware that such an unreasonable use of water is absolutely against public policy, detrimental to other consumers, if there is a scarcity of water, and not by any means contemplated in furnishing water by municipalities to its consumers. Thank God, we have but few of them. Did we have many, we would have to erect another system of water works. I have brought this to your attention for the purpose of having you consider a fair, just and practical way, if possible, of making equitable charges for water used for irrigating purposes. The water used for domestic purposes cut so small a figure that the consideration of it would hardly justify the time required. One hour of irrigating the usual garden surrounding the ordinary home will require far



more water than the family, even if it consists of ten persons, would use for domestic purposes in a month.

#### STREET LIGHTING.

Modesto, in addition to its municipal water system, is also the proud possessor of its own street lighting system. We have located in the water works building, a small electric plant, that supplies our city with light during the dark hours of night.

I bring this to your notice for the purpose of still further showing to you the benefits of municipal ownership of water works. In order to pump the water necessary to supply the city, certain powers were required. We had to have steam power, none other were available. In providing this power, of course, it was prudent to get all we needed, and it was also prudent to suppose that the city would grow, and it was prudent to get power enough to be prepared for future necessities. This was done. We had the power, in fact, we had to spare; we had a surplus.

A year ago, a gentleman residing in San Francisco, F. W. Eaton, Esq., who had for some years been operating an electric plant in our city, came to the conclusion that his plant was not a financial success, because of heavy competition encountered, by coming in contact with the Modesto Gas Company, a wealthy corporation doing business in Modesto, he offered to sell a portion of his plant to the city upon liberal, and what was considered fair terms. The Board of City Trustees having the matter under consideration, finally concluded to accept the offer made, by F. W. Eaton, Esq., and had that portion of the machinery included in the agreement removed to the water works. This machinery consists of: 1 High Speed Payne Engine, 10½x12, 250 revolutions per minute; 1 dynamo, National Alternating, capacity 500 lights, revolutions per minute 1500; 1000 to 50 volts, transformer system; switchboard and other implements, together with

pole and wire line of about 8 miles, with lamps, etc., ready for use, numbering 10 Helias Alternating Incandescent Arch Lamps, 1200 C. P., 50 incandescent lamps for station use, 16 C. P. each. The foregoing number of lights is sufficient for the city's use. It is more than we had when we were compelled to purchase our street lights from private corporations. For the last four years prior to municipal ownership of street lighting, we paid to private corporations from \$2200 to \$2600 per year for light, and we did not begin to have the same service that we now have. Now, under municipal ownership, we can, during the winter months, regulate our lights to suit the convenience of our people, and we do it. The engineer in charge at the light or water works is given power to start his light at any hour in the evening that in his judgement is reasonable. If for any reason, that darkness, at this season of the year approaches at 5:30, P. M., you will find our lights in full blast. If it is a clear day and the engineer concludes that it is not necessary to start the lights until 6 P. M., then they are not started until that hour, but remember, the engineers are working for the public, have no fish to fry and no bosses to favor, except the general public. They are always working for the public good, and general satisfaction to and by the public is always the result. We employ two engineers at our municipal works. Engineer Wood has been in charge since the works was started. Nothing further need to be said. Engineer Cook has been at his station since one year after the works were started. Nothing further need to be said.

#### BENEFITS OF MUNICIPAL OWNERSHIP OF WATER WORKS.

What are the benefits of municipal ownership of the Modesto City Water Works in dollars and cents.

1 The municipality has at all hours

during the day and night, a good and sufficient supply of pure and wholesome water for all legitimate and reasonable purposes, unhampered by any boss rule, because the municipality is the King.

Estimate that value yourselves.

2 The municipality has at all hours during the day and night, not only a plentiful supply of water for fire purposes, but have further at all hours during the day and night, 80 lbs. of steam in the boilers—with fire banked—at hours when the machinery may be at a stand still, so that the very moment an alarm of fire is sounded, the municipality is at all times ready to do their part so far as furnishing water with sufficient force is concerned for the extinguishment of any fire, however severe. During the six years of municipal ownership of the water works, we have never yet had a fire, where the adjoining property was damaged to any extent by fire itself; water may have had its effect upon it—yes—but fire—no.

Here I suppose, is as good a place and time as any, to mention our volunteer fire company. They figure as much as anyone, in the management of municipal affairs. They are the boys, who, without one cent's worth of remuneration, listen to, and hear the midnight bell, that quickly awakens them from their slumbers, and they hurriedly rush to, and protect our property from destruction by that Arch Fiend "Fire."

They do not ask you or I for one cent's worth of compensation. All they ask of you, is; that on the day following a fire, that you will gather on the street corner and criticize their work. Just say; had I been a fireman, I would and could have put that fire out before it had done one dollar's worth of damage. That is sufficient compensation for them. They will go about their business, and wait for the next clang of the bell. When they are again ready for business, and little it then matters to them, as to whether the burning building, or one of the good but idle

citizens, who, in the past, may have criticised their work, became a target, for the well directed and forcible stream flowing from the nozzle held by strong and sturdy hands.

Former years and prior to municipal ownership of water works, we paid yearly for water for fire purposes. \$500.00.

#### FIRE INSURANCE.

What Effect has Municipal Ownership of Water Works upon the Premium Charged.

We are all aware that the insurance people are capable of keeping their own secrets, and for that reason we can not determine in dollars and cents, the benefits derived to municipalities having their own water system, but we can determine by comparison of past rates, that so far as our municipality is concerned, that we have cheaper rates, since we became the owner of municipal water works, than we had before and the slightest reduction in rates to the individual insured, may amount to a large sum to all of the insured.

Hence I place such a benefit at the small sum of saving, at \$1000.

#### STREET SPRINKLING.

Prior to ownership of municipal water works, we paid yearly to the private corporation, about \$2000 for water for that purpose, and that only sprinkled our streets two blocks beyond the business limits of the city. Now we sprinkle all of the streets of the city, of course some more and some less, but they all receive some water, and we save by such sprinkling, at least \$300 in street repair per year. Under private ownership, the water used for street sprinkling cost the city \$2000 per annum.

#### SEWER FLUSHING, AND WATER USED FOR SEWER PURPOSES.

I am perfectly willing to admit that neither I, nor any other man can estimate the value of a sewer system to a municipality, but that it has a value no one will deny. I will only estimate that value at what it cost to furnish water for it, and that I will only place



at \$500 per annum, surely cheap enough.

#### STREET LIGHT.

Prior to municipal ownership of street lighting, we paid yearly from \$2200 to \$2600 for street light to private corporations according to the number of lights used. These corporations were the Modesto Gas Company, or the Modesto Electric Light Company. Since the municipal ownership of the lighting plant, because of power furnished by the water plant, we have not only a greater number of lights, but we have a much better service, and it cost us \$97.50 per month, or a saving of at least \$1300 per annum. Taking into consideration the lights used at the power house, the lights used at the hose company's house, lights used at other public places, and call that work \$200 per year, we have a total saving of \$1500 per year.

I have statistic to prove this if any one doubt my figures.

Now gentlemen, this resolves itself into this proposition:

The municipality is benefited per year by

Virtue of its own water system,	\$ 500
Water for fire purposes,	500
Fire Insurance Premiums	1000
Street sprinkling	2000
Sewer flushing	500
Street light	500
Many other small amounts not taken into consideration.	

Total	\$6000
-------	--------

This amount saved by virtue of municipal water works is equal to the yearly payment of one-twentieth of the principal indebtedness and the interest upon the same. What is the result? The actual benefit to the people in the municipality pay the cost of construction, and the low water rates now charged consumers pay the running expense of the water plant. Can you wish for anything better, or can you show in anything more favorable?

One thing forgotten to mention was that while we have never been short of water, the dry seasons of 1898 and 1899 ran us so close that we considered it prudent to supply more water, hence we have just completed a new well, at a cost of about \$1000. This well has a diameter of 12" and a depth of 268 feet, and is connected through a tunnel with the pumps in the pumping pit.



*M. I. Sorensen.*

**MAYOR RICHARDS**—It is suggested that Mr. Hunt of Santa Barbara has something interesting to say upon the subject.

#### Hunt, of Santa Barbara.

Mr. President and Gentlemen of the Convention: While I am not prepared to make a speech, I can probably tell you a little something about our system of municipal water works in Santa Barbara that will be of interest.

About five years ago, the city of Santa Barbara was obliged, on account of dearth of water in the city, to try to do something on its own account in the way of a water system. They simply had to have it. The Mission Water Company, which then supplied the city, had an entirely inadequate supply. Some few hundred dollars were expended by way of experiment, in digging wells in various parts of the city, but no adequate supply was received from those wells. Then the engineers went up into the mountains about 1400 feet in a dry canon, and,

like Moses of old, smote the rock. We have now a tunnel 3000 feet deep into the rock there, and there is 24 inches of water coming out. This water is piped from the tunnel to a power house 500 feet below, and it there runs an electric motor that furnishes the power to light the tunnel, and also supplies 526 lights to the city.

In round numbers, I think the tunnel and the water system has cost the city from the time of its inception until the 1st of July of this year in the neighborhood of \$80,000. The city voted bonds three years ago for the purpose of piping the city \$65,000. The bonds were sold, but at about that time, before the issue of the bonds, the suit of Pat Murphy vs. City of San Luis Obispo was pending, and the purchasers of the bonds asked us to wait until that suit was determined. But the citizens of Santa Barbara would not wait. They said to the trustees, "Tax us for it, and we will pay the taxes." Our charter permits us to levy any kind of a rate we may choose. We levied a rate of \$2. The taxes were payable on the first Monday in December, and on the first day of December, every dollar of it was paid. We published no delinquent list that year. The pipes were purchased and put in. As I said before, the total cost of this system to the city is about \$80,000, which includes about 5,000 acres of land in the neighborhood of the tunnel. We are now 3,000 feet in the mountain, and expect a great augmentation of water in the very near future, as soon as a hard, impenetrable stone wall that we are now tunneling in is passed through, and which the surface indications show will be about 500 feet more.

The city furnishes water to its consumers at a rate about one-half that which the other company charge. We have needed the whole system, and the net revenue from the system, to say nothing about the saving in insurance rates effected by our better fire protection, at the conclusion of the fiscal year

in July last, counting the saving also in street sprinkling, sewer flushing, etc., was a little over \$1100 per month from the water system. The cost of running the tunnel has averaged about \$900 per month, so that although the tunnel is in the nature of an experiment, the trustees think that as long as the experiment pays for itself, and a little more, we are justified in continuing the tunnel. I thank you.

MAYOR SWEET—In regard to the matter of insurance, I would like to say that in Santa Rosa we have made an estimate, and it is a close one, too, and we know that insurance rates there have been lowered just 25 per cent since we have put in our system of water works. It is estimated that that amounts to a saving of \$20,000 to the citizens of Santa Rosa alone. The city has been re-rated, new drawings have been made, and the agents up there have lowered the rating somewhat besides that, probably an average of not less than \$25,000, all told.

MR. RICHARDS — We have been interested in hearing from a number of gentlemen from cities fortunate enough to own their own water works. I will now call upon a gentleman who resides town that is now struggling with the water works problem, Prof. Randall, of the State University, at Berkeley.

#### Professor Randall, of Berkeley.

Mr. President and Gentlemen of the Convention: I am at somewhat a disadvantage in coming before you today. I came here rather to be instructed than to impart information. I can say, however, that I am much interested in the question of municipal ownership of water works, although I come from a town where the water works are not owned by the municipality.

It seems to me that the whole question is a financial question, simply one of dollars and cents. The interests of the private corporation that supplies the town are entirely different from the interests of the people. It is of course



to the interest of the corporation to make as much interest as it can on its investment, and they try in every way possible, that is honorable, at least, to make as much as they can. We perhaps could get some light upon the question by a consideration of the question of the way water rates are fixed, and the way the revenue that these water companies collect is really determined. Most of the water companies, so far as my experience shows, are the outgrowth of small concerns. As the town increase in size, the plant is extended, and this of course complicates matters, because the value of the plant is supposed, in a certain way, at least, to be the basis for fixing the water rates. The books are kept by the water companies, probably, according to law, but as many years have passed, we will say, since the books were commenced, it is often very difficult to really find out what the cost of the water works have been, and what, from this basis, would be a proper charge for the water. Furthermore, the question is complicated by the water company's having property that is really not needful in the supply of water for the town, and of course they attempt, as has been attempted in a great many other kinds of business, to make it appear that the whole thing is necessary to the supplying of water to the town. Again, the whole thing is complicated by different men being on the boards of trustees. For a series of years a man is on the board, and he becomes more or less familiar with the conditions of things relative to the water works, and is able to judge as to what would be the proper charge for water. Then there is a change and that man is no longer in the board. That complicates matters.

So far as I have been able to observe, water rates are really fixed a good deal by guess. That is, some sort of basis is had for the fixing of the rates, but a great many things slip in that perhaps should not strictly be there, but which cannot be eliminated.

As a matter of fact, I think generally the water companies succeed pretty well in collecting a good revenue from the water that is actually and necessarily invested in the plant—a very much higher revenue than would be paid if the town owned its water works. Of course, I cannot blame the water companies for doing this. With them it is a business proposition, and they properly try to make all they can out of the investment.

On the other side of the case there are the people. For them it is a question of having their own water works, for several reasons, among which we may enumerate the possibility of very materially decreasing the cost of the water that is used. I cannot speak from the experience on this point, but you have been told by several gentlemen here this afternoon who are well informed upon the subject, that the cost is very much less where the municipality own its water works than where the water is supplied by a private corporation. Then again, as to what the people get is a question of great importance. Where the towns are supplied by private corporations, so far as I have observed the pipe system for the distribution of the water is almost invariably very incomplete for the purpose of supplying water for ordinary use, ordinary domestic use, and for street sprinkling, and so on. And many of the systems are entire failures when it comes to the supplying of water for fire purposes. This is an exceedingly an important thing for people to have in mind when they are considering the advisability of municipal ownership.

Again, in many localities the question of quality of water comes in. There again the interests of the people and the interests of the corporation are different. It is the interest of the corporation to supply as poor a quality, if need be, as the people will buy and pay for, while it is the interest of the municipality to have pure and wholesome water.

In fact, from beginning to end, it seems to me there interests are largely different, and all those things should be taken into consideration by the people when considering the question of municipal ownership.

I may say in regard to Berkeley, the water is supplied largely by the Alameda Water Company, the Contra Costa Water Company supplying a part of the town. The water is generally, or I may say entirely obtained from tunnels that are dug in the hills back of the town, though some of it comes from springs and bored wells. The supply is from quite a number of different sources, separated, perhaps, an extreme of several miles. In other words, it is a collection of lots of small sources of water, lots of small water supplies. The water is generally wholesome and good.

It may also be of interest to the Convention to know that Berkeley is at the present time looking into the question of municipal ownership. We have taken steps to investigate the question so far as sources of supply are concerned. The thing has been carried so far that certain citizens of Berkeley, people who are interested in the question and have acquired a certain tract of land north of the town, and experimental wells are being bored. Those wells have been pumped to find out their capacity, and, so far as tests have been made, the promise is good that they will be able to supply the municipality. And so I think that in the course of time Berkeley may be among those cities that own their own water works. (Applause.)

MAYOR RICHARDS—I believe Secretary Mason has something of interest to read in this connection.

SECRETARY MASON—I have here a short statement from the City of Sacramento upon this subject of experiences of cities with municipal water supplies. It seems that Sacramento is the leader in this movement, since it has owned its plant since 1854.

### Sacramento's Experience.

Replying to your favor, requesting a statement of the experience of our City relative to the advantages derived from our ownership of the City Water Works, permit me to say, that the plant has been owned by the City since 1854; it consists of three pumps and engines, the last one purchased being the Allis Pump; a Holly Pump was purchased some 27 years ago, but is still in active service; and a Stevens Pump now used only as a reserve pump. The plant is estimated to be valued at \$1,500,000.00.

During the year 1898, 1,962,768,000 gallons of water were pumped, at an average cost of \$7.70 per million gallons.

During the same year, the receipts amounted to \$103,939.25, and the expenditures, \$30,100.60, making a profit to the City of \$73,838.65.

The Water Works has always been a source of great revenue to the City, and I am a firm believer in municipal ownership wherever practicable.

A further advantage to residents is in the almost unlimited quantity furnished at a very low rate, thereby enabling them to use water for power, and extensively for irrigation purposes.

Our experience has been so flattering that we would recommend that all Cities should own and operate their own Water Works.

Trusting that this limited statement will prove of benefit to the League, I remain

Very truly yours,

WM. LAND.

SECRETARY MASON—I also have a more extended statement from the town of Monrovia, in the southern part of the State, having its own water works. I will not read it, but I will state that it is very satisfactory. The statement will be printed.

MR. SPINNEY—Mr. President, I come from the city of Fresno, and we want the city to own its own water works. But the legislature has blocked us in that by making it a law that a city of



our class cannot have any more than \$10,000 for improvements, and you could not buy the plant for any such amount, as it is worth \$60,000. That law was passed about three or four years ago, I think. So we have got a plant belonging to a corporation, and we cannot reach, although we have been trying to. We would like to have this body frame an act to submit to the legislature to remove that law, so that the city of Fresno can get a new city water works if it feels like it. Our city feels like going ahead with public improvements. We are anxious to have the water works. And we want that section removed from the statute books so that we may have the power to buy or build a city water works. The act is in reference to cities of the fifth class, I think it is.

MR. WINTER, OF REDWOOD CITY—Mr. President, I would like to say that Redwood City owns its own water plant, and has done so for twenty-four years. It is a wooden structure with wooden tanks, and they are now going to issue some bonds to put up a steel plant with. We have an income from the water works of about \$500 a month, and we also have 36 incandescent lights which are run in conjunction with the water works, and it still pays after paying for what those lights would cost. At one time we paid \$7.50 per arc light per month. That would be somewheres in the neighborhood of \$270 per month. The water works are saving us that amount any way.

Nearly all our houses are metered. We charge fifty cents a thousand gallons to the houses that are metered, and a dollar a month to those that have not meters. People there find the system very good, and have no fault to find. I think if all the cities in the State had their own water works they would find it a most excellent thing.

#### **Experience of Monrovia.**

The experience of the City of Monrovia relative to municipal ownership

of water has extended over a period of eleven years. The supply previous to July of the present year was obtained from canons in the Sierra Madre Mountains just above and back of the city. With a population of about 1000, and about 60 acres of orange trees in 1890, the insufficiency of the water supply was evident, and a bond issue of \$40,000 was authorized by a popular vote for the purpose of constructing water works, the intention being to purchase water-bearing lands, and rights, in the canons, and to construct a storage reservoir, and lay additional pipes in the city. Of this issue \$39,400 was floated and \$19,500 of this amount was used in purchasing lands and water rights, the balance realized from the sale of the bonds was expended in constructing a storage reservoir with a capacity of 4,300,000, gallons and laying additional pipes in the city. The population increasing, also the acreage set to orange trees, it became evident in 1895, that an increased water supply was a necessity, another bond issue of \$40,000 was authorized for the purpose of water development in the mountains by means of tunneling, and piping the water from its sources to the storage reservoir. \$36,500 of this issue was floated and so used, increasing the supply by a small quantity of water developed by tunneling, and by a considerable quantity of salvage water by reason of the piping of the waters, from their sources to the reservoir. With the lack of rainfall the past two seasons and the increase of the acreage set to orange trees to about 800 acres, it became evident that the situation was critical and the increase of the water supply imperative, and the Board of Trustees submitted the question of another issue of bonds for the purpose of constructing additional water works, to the voters of the city. The issue of bonds to the amount of \$25,000 was approved by a large majority. With the money obtained from the sale of this issue of bonds, a tract of 5½ acres of land located in the edge

of an artesian belt about four miles distant from the city, was purchased. Upon this tract two 10" wells have been sunk to a depth of 515,' a flow of  $2\frac{1}{2}$  M. I. of water was obtained from one, and the water rises to the surface of the ground in the other. A test of one of the wells by pumping with compressed air, developed 72 M. I.'s water receding 30' below surface. The land at the wells having been ascertained to have an elevation of 51' above a point near the center of the city, a gravely, steel-pipe line, 14" in diameter was constructed and a compressed air pumping plant was installed and pumping began the 17th of July, after which time the water obtained from the mountain system was distributed on the lands lying above those upon which the water from the new system could be distributed by gravitation. The additional water thus obtained not only averted the crises but saved the orchards and matured a fine crop of fruit, and infused new hope and energy in the inhabitants of the city, and effectually solved the all important problem of its water supply.

Monrovia up to this time had been denominated a free water town, the expense of maintaining the system and distributing the water having been provided for by taxation. But in operating the new system it became necessary to pump the larger part of the water supply which materially increased the expenses of operating the system. After

careful deliberation on the of the Board of Trustees they arrived at the unanimous conclusion that the other means of meeting the expenses of maintaining and operating the system must be devised, whereupon an ordinance establishing water rates was passed and made effective on and after August 15, 1899, and although the rates (of which I enclose a copy) are low, it is believed that they will produce sufficient revenue to meet the necessary expenses of the system.

In conclusion I will say that although from the very beginning the city in its management and control of the water system, has had to deal with some very serious complications arising from diverse claims of rights and ownership of water which have caused a great deal of annoyance and vexation to the officials of the city in the discharge of their duties in connection with the operation and management of the water system, but which happily at the present time are in a fair way to be satisfactorily adjusted. I am sure that the citizens are unanimously, or very nearly so, in favor of municipal ownership of the city's water system and that it would be impossible to get the consent of the people to turn the system over to any corporation.

Very Respectfully,

W. A. WALKER, City Clerk.

The Convention at this point took a recess until eight o'clock P. M.

### "A Continuing City."

Address by Dr. David Starr Jordan of Stanford University, at the Convention of the League of California Municipalities, at San Francisco, Dec. 14, 1899.

MAYOR PHELAN—The Convention will please come to order. We are honored to-night by the presence of the President of Stanford University, Dr. David Starr Jordan, who has kindly consented to discuss in his own way, "A Continuing City." I have not the faintest idea what is in store for us. Some gentleman, probably representing a neighboring city where he is a public

official, said that there was an omission in the program; that after the word "city" there should have been added "official"—"A Continuing City Official." He thought it had something to do with perpetual tenure. However, the subject is a mysterious one and in the unfolding of it I am sure we will be greatly edified and our curiosity gratified by Dr. Jordan. Gentlemen of the Conven-



tion, I introduce to you Dr. Jordan.

DR. JORDAN—Gentlemen of the Convention, I am glad to speak to you to-night, if for no other reason than simply to show my appreciation of what you are doing. It seems to me that there is no class of citizens doing more for their country just now than those who are devoting themselves to the question of sound municipal government. There are other kinds of men that, take the country through, are perhaps more conspicuous, but they are not any of them more patriotic, nor are any of them doing any more good.

I have never governed a city myself. In fact, I have had very little to do with it, except to watch Mayor Phelan. I will give you some of the generalizations that I may have reached upon the topic that has been assigned to me, without any of the misfortunes of actual experience.

The most conspicuous failure of democracy in this country has been in the direction of local government, and especially municipal government. Our cities have been so badly managed as a whole that the time has come when, if we are going to have a continuing city, we shall have to change our ways. Great Britain, on the other hand, has made her greatest success in city government in the handling of local affairs. Our city government has been defective largely because of the failure to provide government by the people for the people.

This failure in municipal government, it seems to me, represents in some measure the decay of patriotism and the decay of popular integrity. You have no doubt all of you noted what has recently been said by one of the great newspapers upon a recent election there. The failure of government in that city lies largely in the unpatriotic neglect of her citizens. So, too, Jacob Ries says this: "The real Tammany is not the conscienceless rascal who plunders our treasury and feeds on our substance. That one is a mere counterfeit. It is

the voter who waits for a carriage to take him to the polls, the man who doesn't see what's the use, the business man who says business is business and he has no time to waste on voting, the citizen who will wait to see which way the cat jumps because he doesn't want to throw his vote away, the coward who doesn't want to antagonize anybody, the fool who washes his hands of politics—these are after the boss's own heart. For every one whose vote he buys, there are two of those whose votes he gets for nothing."

That touches, in a large measure, the antidote for the condition, and that is, public spirit. That is a thing that we never can have too much of. It has been suggested seriously that the only way to help this difficulty is to deprive of the right to vote all who fail to exercise that right. That is, to limit the franchise to those who have exercised it, and make it somewhat difficult for a man who has failed to vote at a given election, to vote again. Perhaps that might prove an efficacious and advantageous thing.

Again, we have not learned the art of living in cities. Apparently it is not a very easy art to master. In the old days when people lived in tents, or wandered to and fro, never living anywhere, when they had worn out their city, they could leave it and try again in some other place. That was the thought I had in the expression "a continuing city," because in our civilization it is necessary that our cities should be permanent, and prepared for a life of generations and even centuries. They cannot go on keeping up piles of filth in the literal sense or in the metaphorical sense. Nor can they abandon the filth which they have once accumulated.

It seems to me that the cost of municipal corruption and bad government is the greatest burden we have to bear. The questions of the tariff and foreign commerce and foreign affairs, and all such matters of politics, are matters

really of relatively small importance to the individual man, as compared with the handling of the affairs immediately about him, in municipal government. Evil must come whenever the duties of government fall into the hands of men who are in it for what they can make and not for the sake of giving the people the best possible service. We have defective sewage, which carries with it all sorts of disease; we have filthy streets, which are inconvenient to people who have to use them, and also the cause of disease; we have bad schools, which is perhaps the very worst feature of municipal corruption, because in the schools of to-day the future of our city or our country is written. If it is to be a continuing city, the children have to be trained in the ways that shall make them better, just as far as education can make them so. In saloon politics, all notion of what a country stands for, what a flag stands for, of what the principles of government are, everything that makes a country worth living in, are totally lost.

Then you have the atmosphere of slums, and if you are to have a continuing city, there must be no slums. If a city like San Francisco is to exist, it cannot have a Chinatown in the heart of it, with all that Chinatown represents and all that the neighborhood around it represents. I do not say that this city is worse than others. In many ways it is perhaps better managed than many cities of its size. But in a continuing city there is no place for the immoral atmosphere of the slums. The physical atmosphere, the poison of miasma and the poison of vice, go into every home. There is not a home in San Francisco as pure as it would be if it were not for the presence of these immoral spots that every child has to learn and will learn before he gets through with his life in San Francisco. This last point is evidenced by the lives of the country boys as compared with those from the city, when they come to one of our universities. That ought not

to be so. The city is the best place in the world to live, if it is properly managed.

Again, as the result and as the cost of this municipal corruption, we have adulterations of food, and we have poisoned water. Each citizen cannot look out for the poison in his food products. He cannot afford to get his own water. With all these things, you have the failure of justice. Justice means equality before the law, and the basal idea of our government is, that while a man may not be the equal of others in other respects, when it comes to the law, every man should be the equal of each and every other. And it was the thought of our fathers that the laws of our country should not be respecters of persons. But with bad government, you find a great deal of difference between the man who has a pull and the man who has not.

With all this you have the decay of patriotism of which I have already noted mention. People lose sight of what patriotism is, of what the country is and what it stands for. And so the poison of the badly governed city goes every where, into every home.

We are working along lines that could not be anticipated by our fathers. The government of our country began in the idea of the town meeting. The Pilgrim Fathers with Richard Rumbold "never could believe that God had brought into the world a certain few men all booted and spurred, with millions of men all saddled and bridled for them to ride." And in each little town they gathered together to discuss the affairs that concerned their government. That was the beginning of the town meeting. From the town meeting they sent a few of the wisest of their representatives to the county meeting. And from the county meetings, they sent again certain of their wisest men to make the public laws at the capital of the colony.

In the early days, when men went about on foot or horse without cars or



steamships, this plan had its advantages, because they trusted their wisest men fully to look after their affairs, while they paid more particular attention to what concerned them locally. Nowadays, with the telegraph and the newspaper, we know more about what happens at the national capital than do our senators and representatives there, because each one of us has more time than they have to keep posted. But when it comes to our own local affairs, we are not by any means acquainted with what is going on, in the same degree. And it is largely because of the advent of the telegraph and newspaper that the old idea of the town meeting has been over-turned in our local government.

This is a condition of things, of course, for which nobody is to blame and which nobody could help. Even if we wanted to, we could not turn back into the days when we had no telegraph and no great newspaper. We have to recognize, however, that one of the great sources of local corruption in government is because of our lack of information upon the interest in local conditions and necessities. We are not going to get any better government than the people who are governed are ready to demand.

So the suggestion that Mr. Ries makes, is that the real enemy to good government is not the boss himself, on the watch for all he can make, not the saloon politician, but the good citizen who does not pay any real serious attention to what is going on around him, who is not willing to sacrifice his time for the sake of improving things. The political functions he neglects are taken up by the boss and his benchmen.

The duties of our representatives at Washington, through the fact that we know more about their affairs than they do themselves, are not what they should be. A large share of the time of a senator is occupied by people who want something—something they should not have. Our representatives at Wash-

ington, instead of being the wisest men in the community acting for the common interests alone, have become the attorneys of the leading forces in the community which they represent. If the leading force happens to be the people at large, then they stand as attorneys for the people. If the leading force happens to be a great corporation, then the representative is largely the mouthpiece of that influence.

With all this, with our attention being turned away from our local affairs, notwithstanding the fact that our local affairs are of the greatest importance to us, we find a great many people who say that politics in the United States are "insufferably parochial" in other words, that they are intolerably local, and that even if we had the necessary forces under our control, yet our politics is so narrow that we must reach out and take a hand in what is going on all over the earth, in order to save our affairs from being so essentially our own. Thus we move further away from the ideal of our fathers and the ideal of good government. Because democracy is a scheme of self-government by the people themselves in their own homes. Its function to enable each group of citizens to handle its own affairs in its own way. If they are going to do that wisely, they must give attention to their neighborhood and parish affairs. "The eyes of the fools" says an ancient proverb, "are at the ends of the Earth."

It has been said that we must vote for principles, no matter who are behind them, "Principles, not men." A distinction should here be drawn. When we come to national affairs, it is primarily a question of principle. But when it comes to local affairs, then the motto should be, "Men, and not principles." It does not make a button's difference to the citizens of San Francisco whether the Mayor is a Democrat or a Republican. But it does make a vast difference whether the man selected be an honest man, or not. (Applause.)

Dr. Willcox of Cornell University has

lately published an address on city government, in which he has this to say: "There are three fundamental evils in the government of our cities. The first is economic and consists in the waste of public funds. The second is political in the true sense, and consists in the inadequacy of municipal service. The third is moral, and consists in the corruption of civic authority for the furtherance of individual ends. The chief importance of this third evil lies in the fact that it throws politics into disrepute and degrades civic ideals, thus rendering co-operation for the attainment of truly political ends well nigh impossible."

There are other faults along these same lines that are partly results and partly the causes of our faults. These are more distinctly American than the others—the others occur everywhere. One of them is the private control of public functions. For instance, every man in this city must have water. The moment you put the water into private hands, you have private control, and there is danger in that private control that it shall be an object with somebody to furnish bad water at a price for good water, or good water at an unreasonable price. Thereby some single corporation or association of men may become a powerful element in bad government. That, I take it, is the argument in favor of furnishing these things directly by the municipality itself, because, if we allow individual corporations to furnish water or to furnish transportation or light, there is a danger that the government will become one of the interest of these corporations. It may be to their interest to have bad government. When you have large corporations, enterprising business men, business initiative, and all those things, interested in bad government, you have very powerful forces on the side of municipal corruption. The remedy for this is found in the city owning these things for itself. But then you have the opposite danger of a waste of the public funds, and an inadequate handling of

them. So that, either way, you are subject to danger. I do not mean to denounce corporations as such. It does not serve any honest purpose for any one to do so. But this thing we have to recognize: we must so arrange our affairs, if we can, that the interest of these corporations and of these vast business enterprises will be identical with the interests of the city, because, where they are opposed to the interests of the city, you are bound to have trouble.

There is another serious difficulty in this connection. Our federal government was originally an alliance or union between more or less independent states. When they formed a nation, it was a federation of states, each one more or less jealous for fear that the interests of the other states would be different from its own, and therefore afraid that the other states would encroach upon its rights. Whether the federal system was good or ill, it was the only one we could have under the conditions.

We have taken this model and applied it to our city government. But a city is not a federation of wards. The people of one ward have the same interests in general that the people of any other ward have. The city is a unit. It is an association of men and property interests. I think that everything about our city charters that recognizes the ward as a unit in government ought to be repealed, because that is a vicious system. The system of proportionate representation is in use in a great many of our societies and in the cities of Great Britain. It is under this system the parties having different objects and ideas, may be proportionately and fairly represented. The Socialists, for example, could concentrate their votes on one or two more, and in that way make sure of having a voice here. A minority party might now have a certain representation in every Board of Supervisors. The essential thing is to make this a truly representative body,



one having the characteristics of the people at large.

Other abuses arise from the use of a system of checks and balances in power also taken from our federal system. Our federal government is so arranged that the President cannot initiate anything. Sometimes he does act on his own account, but theoretically he cannot. We have two Houses of Congress acting as checks upon each other and their co-operation is essential to action.

The English system does not have these different checks. Their Executives have conditional authority. The ministry in charge of affairs can go as far as he pleases, providing the people are pleased with what he does. If he fails, he loses power at once and without warning. We have seen fit to scatter responsibility. Our fathers were afraid of centralization of power, because they thought that authority might fall into the hands of tyrants. They were afraid of imperialism aristocracy and church domination. They did not realize the danger of inefficiency, ignorance and corruption. They did not know anything about the congestion of cities and the rottenness of slums. They were not acquainted with the enterprise of corporations, nor did they know anything of the persistence of blood suckers, which hang on anywhere that blood is to be had.

In such ways the Mayor has become a sort of figurehead, and the system of checks and balances has become a part of our municipal government. The scattering of the power has resulted in a large degree of corruption. Here again we could take a lesson from England. The Mayor of the British city is a man of tremendous authority. But if his acts are not approved by the council, he goes out of office at once. He is a creature of the council, by which he is elected. He is held responsible to it, and the council is immediately responsible to the people of which it is a typical representative class. Of course, in such a system, the council should be a large

council, so that it could properly represent the city. The Mayor should be given power just so long as he acts in such a way as to satisfy the council.

Some one said long years ago that "Eternal vigilance is the price of liberty." That must of course be true, whatever the system, in our public affairs. The citizens of a municipality must not only take an interest in the affairs of the city, but they must exercise an eternal vigilance. We have in this city a Merchants' Association, which it is very evident wields a large power. That association is a sort of city council on the British plan, without any authority whatever, but indicating very clearly that they want the right sort of thing done, and also indicating very clearly that they will not stand any nonsense. As a power for good government, this association is indeed an important one. The members of it are interested in good government. It is a very important thing that, whatever form of charter we may have, the Mayor and council should have the backing of the intelligent public sentiment, the backing of men who keep their eyes open and watch city affairs and are not afraid to say what they think.

Again, there is throughout our whole life a lack of seriousness that is not favorable to good government. Our first impression when a wrong is done is, perhaps, one of anger, but that will wear off and some ludicrous feature of it will appear. One difficulty with our newspapers is, not that the newspaper men want to make people ridiculous or caricature them, but that people will not read their accounts unless they are more or less spiced up. If a man's features are distorted, if it is a good caricature, it attracts attention. In that way our whole system of political affairs has become distorted. When we fight some political opponent we make more extreme caricatures, and say violent things, and perhaps things that are not true. Nobody pays much attention to

them because we do not know whether they are true or not. Then when there is actually occasion for severe condemnation, we cannot be sure that anything has really taken place; in fact, we are the most good natured people in the world, and good natured people are not very good people to govern themselves under the forms of municipal government.

I referred a little while ago to the overshadowing of local politics by national politics. When we are fighting for a good man for mayor, we are doing something that concerns ourselves particularly and not the nation. And it is not our duty to sacrifice our local affairs for national affairs. Some one has said, in this connection, that the only straight ticket an honest man can vote is one that has every crooked name scratched off of it. If you follow the policy of voting for crooked names in order to influence an election somewhere else, then you are bound to have crooked names offered you to vote. The man who votes a straight ticket is one of the greatest agents of corruption. If every voter would scratch a crooked name when he found it on his ticket, there would not be so many crooked names offered us upon the ticket.

In the long run, the only kind of government is self government. No people is going to be governed any better than they demand. There is no race of people on the face of the earth incapable of self government, because there is no race that will not in the long run, give themselves better government than anybody else will give them. (Applause.) Government is never any better than a people can demand, and there is never going to be any other way of getting good government save to demand it. So our cities must govern themselves, and there is not and never will be any advantage in the state's meddling with them. Nor would it be any better if the United States government took a hand in controlling local affairs.

Another feature of the American city unlike those seen in Great Britain is our lack of permanence of abode. Our people are moving about from place to place, while in Great Britain, as in Europe generally, they remain practically fixed. That is somewhat of a disadvantage with us, perhaps, but it is really balanced by the greater intelligence that people acquire because of their moving about.

Finally, we have resting on all our public affairs, that huge incubus that we call the "spoils system;" a system by which many public men devote themselves to getting something for nothing. There are two factors in the basis of this system, the idea that something is to be had for nothing, and that it is right to take it if it comes from the public pocket. The very bad effect of this system is found in all of the branches of our government, but in none is its effect worse, perhaps, than in our public schools. The best men are kept out of the work of the public schools because of the ever present spoils system which we call political patronage.

As I have before said, there is but one way to obtain decent government, and that is by eternal vigilance. Our enemies never, never sleep. We too must keep our eyes open. Only as our citizens are honestly interested in public affairs, are public affairs going to be conducted properly. Only in the degree that this is so, can we have a continuing city or a real democracy. (Applause.)

The remaining proceedings of the convention, consisting of a paper on "Municipal Licenses," by C. N. Kirkbride, and the discussion thereof, and the address by Frederick J. Teggert on "Public Libraries," will be published in the March number.

Municipal Leagues exist in ten states, viz., California, Connecticut, Ohio, Indiana, Michigan, Wisconsin, Illinois, Iowa, Kansas, Massachusetts.



# California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.  
B. F. LAMBORN, - - - - - Business Manager.

Office of Publication, Room 14, Eighth Floor, Mills Building, San Francisco, Cal.

Subscription Price, - - - One Dollar a Year.

The new street act is in process of construction. The members of the committee of the League charged with the work of preparing a new law have been exchanging ideas on the subject for the past two months and these ideas will soon be crystalized into tangible substances. The committee will meet at the office of Mr. Hutchinson, San Francisco, on Monday evening, February 26th, and settle the leading features of the proposed act. A sub-committee will then be appointed to prepare a draft of the same which will be printed and distributed for criticism and possible amendment. If the result of the work of this committee is a satisfactory street law, the existence of the league will have been amply justified.

\*\*\*

The members of the Engineering Committee of the league are commencing to earn their "salaries" by contributing their share towards making the association of practical benefit to the cities of the state. It has been recognized for some time past that many (we might say nearly all) of the municipalities of the state are without any definite specifications for electric lighting contracts. These contracts usually call for the furnishing of a certain number of lamps of 2000 (or 1200) candle power, but seldom specify any definite amount of current to be supplied to these lamps. It is with a view of securing the use of definite terms in the contract, and to provide a means of ascertaining whether or not the requirements of the contract are complied with,

that the committee is engaged in this work. The form of specifications will probably be completed next month.

\*\*\*

In this connection, a question is pertinent, Why is it that some (we do not say all) lighting companies are so shortsighted as not to deal fairly with municipalities? We happen to know of one case where a lighting company has entered into a contract to supply a certain number of 2000 C. P. arc lights. This company knows that it is honor bound to supply each light with a current equal to 450 watts. As a fact it is not supplying to exceed 350 watts. The result is that the municipal officers and people of the town complain of their light service. As a further result there is being developed a sentiment in favor of municipal ownership of a lighting plant. Then when this sentiment reaches an aggressive stage, this same lighting company will probably say that municipal ownership won't do because private ownership is more efficient. It ill becomes those who are engaged in swindling (that is the plain and true term) a municipality to complain of the extravagance and corruption of city officials.

\*\*\*

At the recent special session of the legislature, the Senate adopted a resolution authorizing the committee on municipal corporations to investigate the condition of municipal laws of the state prior to the meeting of the next legislature, and to report thereto such amendments as may be deemed necessary to bring a little order out of the present chaotic state. This resolution was adopted at the request of the League of California Municipalities, and the purpose of it was that the laws to be submitted to the legislature by the League might be officially considered and recommended for passage immediately upon the assembling of the

next legislature. Thus their passage would be wonderfully facilitated. When it is considered that Senator E. K. Taylor of Alameda is chairman, both of the Senate committee on municipal corporations and the legislative committee of the League, it will be readily seen that a very close connection of the two bodies has been established that cannot be otherwise than productive of good results.



Municipal officers who have been getting this magazine for the past six months will please bear in mind that the officers of such cities as are members of the League are entitled to receive it as a matter of right; those officials of cities that are not members have been receiving it that they might form an adequate idea of the aims and purposes of the League. By this time they ought to be fairly well posted. Furthermore, if they wish to continue to receive this publication, they must either have their city join the league, or send the subscription price as individuals. It costs money to print this magazine, and the publishers do not wish to inflict it upon those who neither appreciate it nor the efforts being put forth by the League to improve municipal conditions.



A number of cities are considering the framing of new charters this year by Boards of Freeholders. We hope that they will profit by the experience of other cities that have Freeholders' charters and avoid the mistakes committed in the past. So many mistakes have been made that it is impossible to enumerate them here; but the greatest mistake is made by supposing that fifteen men who have had but a very limited experience in municipal government and who have not made a study of municipal conditions can frame even

a fairly satisfactory fundamental law for a city. A study of city charters in California will reveal the utter ignorance of the charter makers concerning the work that has been intrusted to them. Yet the conceit of them is something phenomenal. Sometime some city will stumble on the proper way to get a charter. The way which we would suggest is: that before calling a freeholders' election, the Board of Trustees should employ three of the foremost municipal students in the state to prepare a charter. Then elect a Board of Freeholders with the distinct understanding that the charter prepared shall be adopted by them with as few changes as possible. But this suggestion is made with a very faint hope that it will be acted upon.



The Secretary of the League has just compiled statistics showing the total bonded debt of the cities of the state. It will be ready for publication next month and will be interesting reading.



ADDENDA TO THE SECRETARY'S REPORT—Since submitting the report to the convention, the following cities have become members of the League, viz: Napa, Fresno, San Diego, Suisun, Riverside, Santa Ana, Santa Barbara, Chico, Auburn, Oceanside, Rio Vista, Redlands.



It is time that city officials should realize that the exercise of the power of bestowing official patronage means their political death. For every friend made there are a dozen enemies created who will have their scalping knives out at the next election. An official who has much patronage to bestow seldom gets re-elected. This fact can be amply verified. The official who is wise will shove the spoils onto someone else.



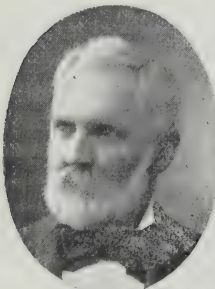
### Brief Sketches of Some City Officials.



One of the members of the Engineering Committee of the League, is C. E. Moore, city engineer of Santa Clara. The professional life of Mr. Moore covers a period of 27 years. For many years he was in charge of R. R. work for various companies, but since 1888 has been engaged as consulting and designing engineer for steel and iron structures, bridges, municipal and private water supply systems, pumping plants, electric lighting plants and sewerage systems. The steel viaduct at Detroit, Mich., now used by several railroads in connection with the Fort St. Union Depot, and for which Mr. Moore made the surveys, estimates and designs, cost about one million dollars. Among his latest works are the municipal water and light systems at Santa Clara, and the municipal water and light, and the sewerage

systems at Palo Alto. He has also been investigating for private parties many matters relating to similar work; also has made numerous reports to town authorities concerning municipal work to be carried out in the future. Mr. Moore is a native of Vermont, and descended from revolutionary stock. His ancestors were pioneers of the old Connecticut colony and saw military service in the war of the Revolution, and also that of 1812. He was educated at Union College (Engineering Dept.) Schenectady, N. Y., class of 1870, and has been a member of the American Society of Civil Engineers since 1880. His home is now at Santa Clara, Cal.

Another member of the Engineering Committee of the League is James W. Johnson, City Engineer of Riverside. Mr. Johnson is a Bostonian by birth and is a graduate of the Massachusetts Institute of Technology. He was engaged for several years in engineering construction in the East on water works and sewerage propositions. He came to California in 1886 and has been actively and steadily engaged in engineering work, serving as engineer for a number of companies engaged in land operations. He has been City Engineer of the city of Riverside for eleven years, during which time many miles of sewers have been laid, a city rock-crushing plant and quarry established and a large amount of public work in the line of macadam and asphalt pavement, gutters, curbs, sidewalks, etc., has been done. While a resident of the east, he joined the Boston Society of Civil Engineers and has always retained his membership therein.



Norman S. Frost, City Engineer of the City of Petaluma, was born in 1848 and was raised in Pennsylvania, finishing his education at Saunders' Military Academy in West Philadelphia. Attaining his majority in the fall of 1869, he went west the following spring and spent the next five years on the frontier of central Kansas. Coming to California, he commenced the practice of his profession, as engineer in charge of railroad construction in the Santa Cruz mountains in 1875-6, and during the years following he carried the transit over the entire length and breadth of California, eastward into Nevada and over a large portion of the southeastern quarter of Arizona, on various more

or less extensive land, railroad and topographical surveys, bringing up in the early '80's in the U. S. Surveyor General's office, in Tucson, A. T., as draughtsman and clerk of private land claims, and afterwards as U. S. deputy on several extensive government land and town site surveys. In 1885 he returned to Cali-

fornia, and having had enough of the hardships and exposure of railroad and government land surveying, he made a specialty of municipal engineering, and was appointed city engineer of the City of Santa Cruz in 1890. At that time Mr. Frost was supposed by his friends to be a hopelessly confirmed old bachelor, but on New Years, 1892, he astonished the good people of Santa Cruz by quietly slipping up to San Francisco and bringing back Mrs. Josephine H. Poole, the widow of a well known contractor. In 1896 he designed some important storm sewer and creek improvement work for the City of Petaluma, and was appointed city engineer the following summer. For nearly twenty years Mr. Frost has been an active member of the Order of Knights of Pythias. At the last convention of the League of Municipalities, he was appointed a member of the Engineering Committee.



J. N. Frank, of San Leandro, is a member of the Judiciary Committee of the League. Mr. Frank was born in Germany in the year 1860. He attended college in that country for several years when he visited this country and on reaching our shores decided to remain. He came to California in 1878. After attending a business school and other educational institutions he engaged in several callings including some newspaper work. Since receiving his degree, in 1896, he has successfully practiced law in San Leandro where he now occupies the position of City Attorney. He is a close

student of municipal affairs and promises to become prominent in League work,

Richard White, who is a member of the committee appointed at the last convention of the League of California Municipalities to recommend a uniform system of municipal bookkeeping, is a resident of Chico, where he holds the position of City Clerk. He was elected to that office by the largest vote ever received by a candidate in that city. Mr. White came to California from the East in 1882, a graduate of the law, and for ten years followed the profession of teaching in the public schools of Butte county. During eight years of this time he was a member of the County Board of Education and for six years was president of that body. He has been practicing law at Chico for nearly five years, acting as Deputy District Attorney for a portion of the time. Has served as City Clerk since 1895 and is deeply interested in municipal affairs. He has been prominent in Democratic politics of the county and was Chairman of the last County Convention of that party.

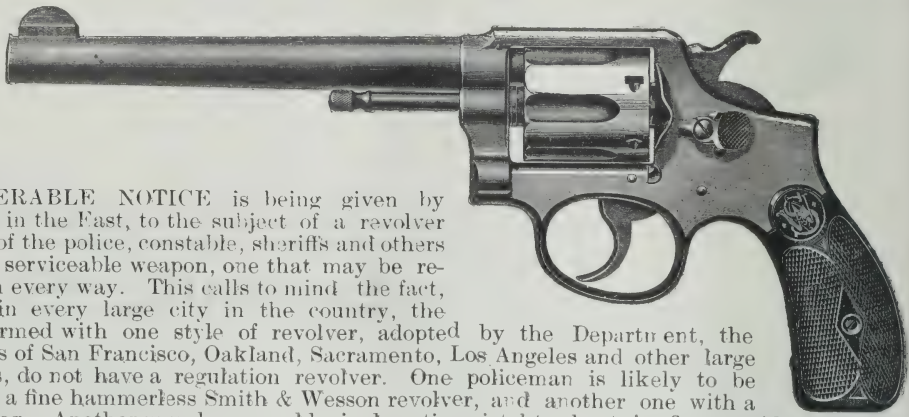


Edward K. Taylor is one of those young men who is is always ready to devote his time and energies for the betterment of municipal affairs. He graduated from college in 1881, took his master's degree in 1884, was admitted to practice by the Supreme Court in 1885, and is a graduate of the law college of the University of California. He has always been a strong advocate of good roads and streets. While traveling throughout the Eastern states and Europe, he made a special study of the various systems of street improvement, and when appointed City Attorney of Alameda in 1887, before that city had improved streets, became one of the foremost champions of improvement. As the result of the energy and wisdom of its officials, the City of Alameda soon became celebrated for its splendid thoroughfares,

and the population rapidly increased from five thousand to sixteen thousand in



habitants. Mr. Taylor has been city attorney of Alameda continuously for the past thirteen years, having been repeatedly elected, carrying every precinct. During his term of office the City of Alameda has not been unsuccessful in any civil litigation. In the performance of his official duties, Mr. Taylor has drafted and enforced many sanitary, health and police regulations which have made Alameda celebrated as one of the healthiest and best governed cities in the United States. He is the author of the first anti-expectoration ordinance, which has now been adopted by all large cities, with beneficial results. Mr. Taylor for many years has been active in Republican politics, both in the councils of the Party, in conventions, and on the stump, and served for six years as a member of the Republican State Executive Committee, for one term being Vice Chairman of that organization. At the last general election he was elected to the office of State Senator, with a majority of about 2200 votes, and as chairman of the Senate Committee on Municipal Corporations rendered effective service in behalf of the cities of California. Among other matters he introduced and secured the adoption of a proposed constitutional amendment exempting bonds hereafter issued by cities from taxation. Mr. Taylor is a strong believer in the objects of and results to be accomplished by the League of California Municipalities.



CONSIDERABLE NOTICE is being given by newspapers in the East, to the subject of a revolver for the use of the police, constables, sheriffs and others who need a serviceable weapon, one that may be relied upon in every way. This calls to mind the fact, that while in every large city in the country, the police are armed with one style of revolver, adopted by the Department, the police forces of San Francisco, Oakland, Sacramento, Los Angeles and other large coast points, do not have a regulation revolver. One policeman is likely to be armed with a fine hammerless Smith & Wesson revolver, and another one with a \$1.75 bull dog. Another may have an old, single action pistol to shoot rim fire cartridges, and it is known that some of the policemen still carry pistols that are loaded with powder and ball.

The need of a serviceable arm of one pattern, was never more apparent than in the recent trouble that the San Francisco police had with an insane man named Haynes, who had barricaded himself in his shanty on Bernal Heights. The police attempted to arrest him; he stationed himself at one of his windows with a rifle, and kept six policemen at bay for several hours, killing one of them. It seemed that he could have been arrested, but for the fact that every policeman in the neighborhood carried a different revolver, so that while one policeman might have a number of cartridges to fit his own revolver, they did not fit the revolver of any other policeman. As a consequence one life was lost, and they were obliged to send in to San Francisco for more cartridges. They finally wounded and captured their man.

Authorities in the East, and United States Army experts, have decided that the new revolver made by Smith & Wesson, of Springfield, Massachusetts, and called the "Military Police" revolver, is an improvement over any arm now on the market, taking a 38 cal. cartridge of U. S. Army size, or an extra large cartridge called the "Smith & Wesson special." This revolver is also made to take the 32-20 Winchester cartridge, but the 38 cal. "Smith & Wesson Special" seems to be the most desirable.

This pistol has been made so that it can be used for target purposes, and for slow firing it has no harder pull than the average, specially made, target pistol. It is a self-cocking revolver, with a swing-out cylinder. This pistol is now being used by a number of policemen in San Francisco, Los Angeles, Portland and other coast cities. The New York Journal states that it is about to be adopted by the United States Government, having proven superior in many respects to the regulation arm now in use, it being more rigid, quicker in action, more closely fitted, easier to eject shells, lighter and more compact in appearance, and shooting a much stronger 38 cal. cartridge.

This is a matter of considerable importance to the police departments of this coast, for, as before stated, none of them have a regulation revolver, and it is a matter that should be brought to the attention of the Various Police Commissioners, constables and sheriffs of this coast. A revolver when *not in use*, can be worth \$1.75 and still be as good an arm as one worth \$12 or \$14, but when the life of any officer may depend upon the reliability of his revolver, it seems to be poor economy to carry a cheap arm.

## What the Cities are Doing.

Visalia has invested in street signs.

Pleasanton is now lighted by electricity.

Gilroy is preparing plans for a new city hall.

Crescent City is improving its fire department.

Petaluma is talking of getting a freeholders' charter.

Santa Clara has passed a house numbering ordinance.

Red Bluff's new sewer system is nearing completion.

Palo Alto is considering extensive street improvements.

Red Bluff has received a new Studebaker sprinkling wagon.

Healdsburg's water and light system will soon be completed.

Berkeley is contemplating a bond issue for a high school building.

Livermore has electric lights furnished by the Livermore Gas Co.

Santa Clara will sell \$30,030 Gas Works bonds on March 12th.

The San Jose city council has called for plans for a new library building.

Salinas is preparing for its municipal election which takes place in March.

A suit to determine the legality of the Los Angeles bond issues has been instituted.

Redondo Beach is initiating proceedings for a \$40,000 bond issue for street improvements.

Kern has passed an order to require bonds of reliable surety companies from all its officers.

Palo Alto's new municipal light plant is now operating to the general satisfaction of the citizens.

San Diego is contemplating issuing bonds to the amount of \$70,000 for general improvements.

Monrovia has called a bond election for issuing \$20,000 bonds for improving and extending its water system.

Trustee Divine, of Sacramento, is busily engaged in figuring the cost of a municipal lighting plant for that city.

Sonoma has passed an ordinance reciting that the public interest demands the acquisition of a system of water works.

Redwood City has sold to F. H. Rollins & Sons its bonds amounting to \$12,124, which were issued to improve its water and light system.

Yreka has voted to issue bonds to the amount of \$70,000 for water works. Last fall an issue of \$50,000 was authorized, but the amount was deemed insufficient for the purpose.

The City of Eureka is investigating the matter of sewers, water works, lighting systems, a new city hall, and new school houses with a view of issuing bonds for the construction of the same.

The town of Vacaville is about to annex all of the township now outside of the town limits; then a bond issue of \$80,000 is proposed wherewith all the roads of the town will be macadamized.

Merced has passed ordinances reciting that a sewer system, a system of water works, and a lighting plant are public necessities. This is preliminary to calling a bond election at which it will be sought to authorize an issue to the amount of one hundred thousand dollars or more.

The test of the Roberts wells near San Leandro by the City of Oakland with a view of developing a municipal water supply, has been abandoned owing to the fact that the condition of the wells precluded a proper test. New wells will have to be bored.

Pasadena's trustees have adopted a resolution declaring that it is their intention to call for an election to elect a Board of Freeholders to frame a new charter; also the engineer has been directed to prepare plans and specifications for a municipal water system.

San Luis Obispo has at last sold its bonds and the money has been received. The deal with the local water company has been consummated and the price paid therefor amounting to \$50,000. The city is in possession of the water works and everything is lovely.

The public improvements contemplated by Oakland include the improving of the sewerage system, a municipal water supply if tests are satisfactory; a salt water plant, improvement of main thoroughfares, construction of wharves, school buildings and sites and fire department houses. It will require \$1,500,000 to make these improvements, exclusive of the water supply.



Chico recently sought to improve a street and for this purpose purchased a quantity of gravel from an adjoining county. The gravel cost \$18.50 and the freight on the same was \$95. This might be cited as an instance of paving a street with freight bills.

The city of Alameda has formulated a moderate, sensible bond proposition which is very characteristic of that well governed municipality and which is likely to be successful. It embraces these provisions: \$25,000 for school improvements, \$25,000 for new library building, \$20,000 for improving Webster street, \$20,000 for additions to electric light plant.



### Personal.

J. H. Kincaid has resigned as trustee of National City and Trustee Lockett at Riverside has done likewise.

J. H. Lyndon has been elected a trustee at Los Gatos.

Councilman C. H. Kramm, of Oakland, died on February 2nd.

J. J. Vanderberg has succeeded I. W. Hellig as trustee of Selma; and C. H. Harrison is City Clerk in place of R. T. Staley, resigned.

There have been a few changes in the personnel of the San Diego Common Council: Alderman Simon Levi, and Delegates C. C. Craig and W. W. Whitson have resigned. In their places have been elected H. M. Landis, Alderman; A. H. Kayser, and Geo. B. Chapman, as Delegates. The Board of Public Works has been changed since the first of the year: H. P. Whitney and A. H. Julian have been succeeded by Andrew Cassidy and W. W. Whitson.



This office is in receipt of the printed copies of the annual reports of the Auditor of San Diego and the City Clerk of Modesto. These reports are complete in every detail and show the expenditures properly itemized. They will inform the inquiring taxpayers just where the money went and be useful in making comparisons with the expenditures of former years. If all cities would publish similar reports, we would then have a means of comparing one city with others and form an idea as to where the extravagancies were.



The Superior Court of the County of Santa Clara has decided that the City of San Jose did not exceed its police powers when it passed an ordinance limiting the height of bill-boards to ten feet.

In connection with the completion of the Palo Alto Lighting System, note for which has been published, it is pleasing to state that in one instance the contract requirements have been considerably exceeded. The Nordberg Corliss Engine furnished by the Tracy Engineering Co., developed on its trial an economy of 25.41 pounds of steam per I. H. P. per hour. This beat the guarantee by 7.6 per cent, and beat all competing guarantees by 14.7 per cent. The test was made by G. H. Marx, professor of engineering of Stanford University.



MUNICIPALITIES is in receipt of a complete file of that excellent publication, "Municipal Affairs," published in New York by the Committee on Municipal Administration. The work covers a wide range of topics of municipal interest. The number devoted to Municipal Socialism, by Prof. Milo B. Maltbie, gives a comprehensive view of the growth of municipal functions. It shows the degree of municipal activities in the past and at the present time throughout the world, and from the tendencies exhibited one can form a fair idea as to what the future will bring forth. The arrangement of the sub-topics is such that the reader is carried along naturally and the progress of municipal government from the ancient city to the modern urban center can be clearly noted. According to the author the greatest activity which is engaging the municipality of to-day is that which may be termed the exercise of industrial functions.

YOUR ONLY HOME COMPANY.



## The Pacific Mutual

Life Insurance Co., of California.

Offers the Best Policies

Life, Endowment,  
Health and Accident  
With Unequalled Security.

Paid Policyholders, - \$11,000,000.00

Home Office, Pacific Mutual Building, S. F.

# CALIFORNIA MUNICIPALITIES

VOL. 2.

San Francisco, March, 1900.

NO. 2.

## The Aim

Of this magazine is to seek for that which is best for the municipality, and to give publication to those things that will aid municipalities to achieve their highest destiny.

### ..... CONTENTS. ....

Municipal Licenses.....	C. N. KIRKBRIDE
The Value of Municipal Libraries.....	FREDERICK J. TEGGERT
The Proposed Street Law.....	JOSEPH HUTCHINSON
Concerning Electric Lighting Contracts—The Use of Garbage as Fuel—Miscellany—Editorial—What the Cities are Doing—Recent Court Decisions.	



## Redwood Tanks, Towers.

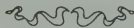
Millwork  
of all kinds.

Pacific Manufacturing Co.,  
SANTA CLARA.

4,250,000,000 gallons of water  
pumped per day by

## Worthington Pumps,

Henry R. Worthington,  
NEW YORK.



Pumping Machinery for all Duties.  
Water Works and Hydraulic Engineers.  
1,700 Cities supplied with Worthington  
Pumping Engines and Meters.

Pacific Branch:  
Rooms 27-28 3d Floor Mills Building,  
SAN FRANCISCO.

Send for Catalog and Water Works Lists.

## A. L. FISH,

Cor. Mission & First Sts,  
San Francisco, Cal.,

— Contractors for —

Water Works, Irrigating, Steam and  
Electric Power Plants, Complete.

Worthington Steam Pumps and Condensers.  
Roots' Rotary Power Pumps.  
Buckeye Automatic Cut-Off Engines.  
Amoskeag Fire Eng. Co's Steam Fire Engines.  
Steam Boilers.

## PACIFIC SURETY COMPANY OF CALIFORNIA.

Paid up Capital, - - - \$250,000  
Surplus as to Policyholders, 303,000

### GUARANTEE AND CASUALTY.

**Surety on Bonds.** Bonds of Suretyship issued  
on behalf of persons holding positions of trust.  
We also act as surety on Bonds required in Court  
proceedings.

Steam Boiler Inspection and Insurance.  
Plate Glass Insurance.

WALLACE EVERSON, *President.*  
JOHN BERMINGHAM, *Vice-President.*  
A. P. REDDING, *Secretary.*

HEAD OFFICE:  
326 Montgomery St., San Francisco.

## Redwood Poles

For ELECTRIC PLANTS, TELEPHONE,  
TELEGRAPH & POWER COMPANIES.

## Union Lumber Co.,

Room 28 Crocker Building,  
SAN FRANCISCO.

Telephone Main 324.

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 2.

San Francisco, Cal., March, 1900.

NO. 2.

## Municipal Licenses.

[Full text of a paper delivered by C. N. Kirkbride, San Mateo, at the Annual Convention of the League of California Municipalities, Dec. 15, 1899, and the General Discussion thereon.]

SO INGRAINED has become the habit of licensing occupations, that few municipalities would venture to stop the custom. The revenue derived therefrom appears to the ordinary city council to be absolutely necessary for carrying out business. Yet as a revenue producer the municipal license as ordinarily enforced is manifestly unfair and unjust. It falls heavily upon lesser tradesmen and minor occupations, while by reason of its comparatively small amount almost exempting the larger businesses.

Licenses are imposed by municipalities by virtue of authority granted for two different purposes—first as a means of obtaining revenue, and second as a means of regulating occupations subject to police control.

The former is in effect a tax and the power to levy it is entirely different from the power to impose the latter. Revenue taxes must be uniform in operation. Ordinarily the power to subject to police regulations does not give the power to tax distinctly for revenue purposes. In California all municipalities are by the constitution endowed with authority to make needed police and sanitary regulations. All municipalities, however, are not endowed with the same authority to levy licenses for purposes of taxation, although the charters which I have examined do give this power, but in language not always

identical. In order to levy taxes municipalities must have a clear grant of power from the legislature. Not so with the authority to license under the police power. A mere grant of the right to make police regulations would be held to authorize the requiring of a license as a condition for doing business and the imposing at least of a sum sufficient to cover the cost of issuing the license. Although the law writers clearly note the distinction between these two classes of licenses, yet I venture to say that in California few councils are aware of the difference. In my town we have the right to levy licenses for both purposes and our ordinance has the following title "An Ordinance Imposing License Taxes for the Purpose of regulation and revenue and fixing the Rates thereof." Under it we provide for licenses for selling merchandise, for circuses, theaters, peddling, conducting blacksmith shops, livery stables, shooting galleries, hobby horses, selling old junk, soliciting, etc. We place a license tax on our merchants for revenue and are supposed to license the theatrical exhibitions as a police regulation. It will not be denied, however, that the whole ordinance was conceived as a revenue measure and is so recognized by the people. And here is where the iniquity of it comes in. The young man conducting a little store and making barely the wages of a skilled



laborer, pays \$2 per quarter license and \$1 for the issuance of it. His finances force him to take his license out quarterly and the annual cost to him is \$12. The larger merchant whose business is at least ten times of the first is taxed \$3 per quarter with the same fee for issuance of the license. In order to save money he takes out an annual license paying altogether \$13. We have only two classes of merchandise licenses. The same inequalities are always to be found in such systems of obtaining revenue. The skilled laborer be it remembered whose income is at least equal to that of the first named license payer gives nothing to the city.

There is only one ground that I can see to excuse such methods of obtaining revenue and that is this. It is an indirect way of compelling the people who live in a community to contribute towards the maintenance of the municipality. The cost of the license of course as a part of the expense of the business is added to the price which the patron of the business must meet, and in this way the resident, independent of the question whether he owns property or not, helps swell the city treasury. Some people argue that such a license is the business man's contribution for the police and fire protection which he obtains at the hands of the municipality, and in a sense this is so, but ultimately the expense comes out of the consumers' hands.

All taxes should be uniform in operation and if this indirect way of raising revenue by means of licenses should be adopted, I fail to see why one or any number of occupations should be taxed and others exempted, and yet we always find exemptions. If a merchant should pay a license so should the lawyer and doctor, the clerk and the laborer. They receive the protection which the municipality affords and should not be relieved from its burdens at the expense of some other class of people. It is to be noted that in the new San Francisco charter the unpopu-

larity and unfairness of this feature of the license habit has found effect in a provision that no licenses be placed on the business of selling merchandise. To my mind that is one of the many good features of this charter.

Licenses imposed under the second ground mentioned, that of regulating occupations and industries subject to public regulation, seem to me to be fixed with a better regard to existing conditions, than those imposed distinctly for revenue. The most common exercise of authority under this head is that of licensing saloons. Nickle-in-the-slot machines, horse races, shows, exhibitions, gaming generally, laundries, etc., are other enterprises frequently licensed, simply as a means of limiting their number and thus regulating the evils they are supposed to engender. The general rule with reference to such licenses is that they must be reasonable, and as to what is reasonable or not the courts will inquire. Of course a large revenue is derived from such an imposing of burdens, but the revenue is only incidental. The theory of such licensing is that it is regulative. Being so and conditions varying in different localities, each municipality should be and properly is the judge of the amount and character of its regulative licenses. In the case of the saloon licenses the courts leave the amount of the license entirely to local authorities, and the actual tax varies as do the winds, fluctuating with the temper of the people and the whims of the councils. No rule can be made which will fit all cases of regulative licenses, and each municipality must work out its own sweet will.

When we consider the subject of licenses generally from the standpoint of the city council engaged in the actual operation of framing a suitable license measure, many troublesome problems present themselves. Some of these difficulties each one of us have probably had to meet at one time or another. I will endeavor to enumerate some of the

questions in this connection which have recently developed in my experience. We had a general provision in our license ordinance covering all sales of merchandise at a fixed place of business. The San Mateo harness makers and blacksmiths carry a stock more or less complete of articles used in their work and useful for persons who trade with them, the former having whips which they occasionally sell, and the latter wagon fittings, screws, nails, etc. These two classes of tradesmen, though it was known they were making sales, refused to take out a license. Merchants complained of the competition, and in the case of the blacksmiths we had finally to amend our ordinance so as to specifically include them.

One of our persistent controversies has been with the Western Union Telegraph Co., which does not recognize an obligation to pay a license in San Mateo any more than it does to pay one in any other place. The ordinance as I first found it simply fixed a lump sum for the business of telegraph companies. The company declined to pay and after their usual habit referred us to the case of *Loupe vs. Part of Mobile*, a decision by the Supreme Court of the United States in favor of the company on the ground that the license ordinance violated the Inter State Commerce clause of the United States Constitution. I advised our council that the ordinance was defective and when it came to the making of a new one, I endeavored to so word it as to meet the objections of the Courts and still impose a tax on the company. Our ordinance at present is as follows:

"Every person, company or corporation operating a telegraph system, or portion thereof, within the county of San Mateo and therewith doing a business which consists wholly or in part in the transmission of messages to and from and through points within the State of California, and where business is not done for the good of the United

States, its officers or agents, must obtain for the doing of said business a license as provided in this ordinance and pay for the same a license tax of \$5 per quarter year; provided that where any such person, company or corporation does a business, a portion of which consists in the transmission of messages as aforesaid to and from and through points within said state, said transmission not being for the good of the United States, its officers or agents, and a portion of which consists in the transmission of messages to or from or through points within said state or of any business which is done for the good of the United States, its officers or agents, such license shall be required of and said tax therefor paid for, only such portion of the business of said person, company or corporation first mentioned and which consists in the transmission of messages to and from and through points within said state, said transmission not being for the government of the United States, its officers or agents, and no license shall be required for the doing of the other portion of the business of said person, company or corporation mentioned in this proviso."

The company endeavored to evade responsibility under this ordinance upon the same ground as before, but being presented with citations and points showing that the ordinance was not open to the former objection, asked for time in order to refer the matter to its New York attorney. We have not as yet learned what the Eastern counsel thinks of our efforts at ordinance making, but indirectly have found out that the company has notified its local agent at San Mateo to close its office, if payment of the license is insisted upon. The company has evidently reached the conclusion that the license is enforceable, but prefers to cease doing business with us rather than to set so dangerous a precedent as that of paying a municipal license. If they should pay to us they know with reason that



other towns would come to the front with a similar demand for license money.

A frequent request made upon governing boards is for protection of residents by license against non-residents. Local tradesmen want outside dealers shut out. This first manifested itself in San Mateo in an agitation by the storekeepers against San Francisco merchants who sent solicitors through the town taking orders for goods which were subsequently delivered through the express company. Obedient to their constituents the Board of Trustees placed a quarterly license tax of \$25 upon the soliciting business and then the San Francisco merchants withdrew. Next a laundryman demanded that solicitors for outside laundries be shut out of business, and finally the local expressmen wanted outside draymen and furniture movers kept from doing local business. Our county is now endeavoring to prohibit itinerant pedlers from plying their vocation among us. Redwood City and Palo Alto are understood to be engaged in a battle in the effort to shut out each other's merchants and lock the door upon them, while San Jose by limiting the height of bill boards is making the business of San Francisco advertisers unprofitable,—though this latter is not being accomplished through the medium of a license tax.

Such discrimination—for discrimination it is,—unadorned and without disguise—is hardly American in spirit. Our government prohibits any such burdens being placed upon commerce between the states, and yet we put all sorts of difficulties in the way of our own interstate business. The strange part of all such evident discrimination is that it can be accomplished so easily and so legally. For wise and beneficent reasons the Courts do not inquire into the motives of municipal legislators, except in cases of actual fraud, any more than they inquire into the motives actuating the State Legislature

in the passage of laws. All the city has to do is to place a heavy tax on the undesirable business enterprise, and while the rule of law is that the license method may not be used to actually prohibit a business, still every presumption is in favor of an ordinance regularly passed, and the discretion exercised by the city council in determining the amount of the license will not be interfered with except in extreme cases.

Occasionally a judge will be found, however, who will not look with so much favor upon the decisions of a city board. We have a case pending before the Supreme Court now, the decision of which will largely hang upon the importance to be given an exercise of discretion by our Board of City Trustees and upon the method of that exercise. The case is this. Our ordinance requires a person who desires a liquor license to first obtain a permit for a license from the Board of Trustees. The application for a permit came before our board and the members being fully informed of the facts refused the permit. Upon mandamus proceedings our Superior Court ordered the permit granted though admitting that the facts within the knowledge of the individual members of the Board would have been sufficient grounds for sustaining their action had the facts been formally brought before the Board during its meeting. In other words he held that we should have resolved our meeting into a trial and had witnesses appear and testify. Believing such a holding not to be the law we have appealed.

The subject of liquor licenses is a frequent cause of worry in municipal government. The Supreme Court of the United States has pronounced the liquor business to be one that is not entitled to any great amount of respect, and remanded its control exclusively to the local authorities. It may be prohibited or limited by ordinance in any way that is uniform in its operation. My experience is that if any attempt at all is made to control the traffic, it

should be specifically done by ordinance rather than by trusting to the judgment of any body of officers concerning the qualifications of the particular individuals who may desire to carry on the business. Local pressure can always be brought to bear in favor of even the most undesirable applicants for saloon licenses.

It is interesting to note the history of the license custom, so far as it can be traced, and strange to say little if anything can be found in the books upon the subject. In the admirable catalogue or index of the San Francisco public library only one reference was to be found under the head of "license" and that was to a government document on the liquor business. In the four volumes of proceedings of the National League of Municipalities nothing was said concerning this important subject. Many encyclopedias do not even contain the word, "license." Under the head of "excise," we find nations imposing burdens corresponding to our licenses away back through the middle ages, and as usual with universal hatred and disgust. Strictly speaking, an excise tax is not a license tax, but rather an internal duty imposed on products of local production and consumption, as distinguished from the customs duties on importations and exportations. It comes from the Latin term "*excidere*," which means "to cut off," and refers to the portion of the commodity cut off and set apart for the revenue before the article was sold. From these old excises our present license system was developed. The first excise introduced in England was in 1642 when such a tax was imposed on liquors. In feudal times taxes used to be levied upon the persons and property of travellers when they passed through certain manors, when they went over certain bridges, when they carried about their goods from place to place to a fair, and when they erected in it a stall to sell them in. These different licenses were called passage, frontage and stallage. Some-

times the poor trader was charged for the privilege of going upon a bridge and then had to pay to get off it.

According to Adam Smith who wrote over one hundred years ago, consumable commodities may be taxed in two different ways. The consumer may either pay an annual sum on account of his using or consuming goods of a certain kind, or the goods may be taxed while they remain in the hands of the dealer and before they are delivered to the consumer. The former is more properly our license tax; the latter the real excise or customs tax. It has been seriously proposed to tax all commodities by the former method, the dealer advancing nothing and the consumer paying a certain periodical sum for the license to consume certain goods. In Holland people paid so much a head for a license to drink tea.

In closing I desire to say that it seems to me that the subject of licenses with its kindred subjects of direct taxation and other forms of municipal revenue, demand attention at the hands of persons interested in good government. The field is broad and apparently not much travelled. Certainly we should devote thought as well to the means whereby our cities obtain their funds as to the manifold and sometimes mysterious ways in which they dispose of them.



### General Discussion.

SECRETARY MASON—Mr. Chairman: I am very much interested in that paper. I think it is worthy of a few minutes discussion. I am afraid we are going to be disappointed in some of our papers this evening, and so I think we can put in a little time to advantage upon this subject. There are one or two points in the paper upon which I would like to comment a little, especially the point in reference to the attempt made by the city of San Mateo to license the Western Union Telegraph



for doing business there. If our own local merchants in various lines of business are compelled to pay licenses, it does not seem to me that a great rich corporation like the Western Union Company that does business over and uses the streets of every city to a certain extent for its poles and wires, should also be made to contribute something to the revenue of the town besides the mere pittance it pays in ad valorem taxes. In some other towns in Santa Clara County, the same reply was sent by the general agent of the Western Union Telegraph Company when it was attempted to make them pay a license tax, viz., that it was contrary to the Interstate Commerce Law and unconstitutional, and they gave several other reasons, refusing to pay the tax absolutely. We did not, however, get so far as to pass an ordinance upon the subject. If Mr. Kirkbride's city has an ordinance that will stand the test of the courts, I would like to see it in force. If they propose to close their place of business in San Mateo on account of that small tax, I would suggest that it might be a good idea to pass the word along the telegraph line, and let every city in the state pass such an ordinance, and see if they would shut up their entire works in the state.

Another point I was going to suggest, although not exactly along the line of license ordinances, that some of the city attorneys of the League might think about, and that is, to what extent a city may charge ground rent for the use of its streets. I notice that the city of Red Bluff recently referred that matter to its city attorney, and I have not seen as yet, any expression of opinion upon that point. Here are a number of concerns that are doing business practically without a franchise, or else they have a franchise upon which they are paying no revenue or tribute to the city, returning no compensation therefor. Can a city impose a tax, or rather a rental, for the use of the street for water and gas pipes and telephone and telegraph

poles, and things of that kind? Can we do it under the present laws, or have we got to have some additional legislation upon the subject? I ask this question because we are all hunting for additional means of securing revenue, and if we can get a revenue from that source, I think it would be very well for most municipalities of the state. I have no doubt there are others here more competent to speak upon this question than I am. I simply take the initiative in the hope of bringing out a more general discussion.

MAYOR SWEET—We will be glad to hear from any others upon the subject.

MR. HUTCHINSON—On the subject of charging the telegraph and telephone companies a license tax, I would like to state that Palo Alto has recently had that experience on a very small scale with the telephone company. The telephone company put up a wire for us from our water works to our fire engine house, and they have been charging us for some time a regular rate for the use of the telephone. About two months ago, the Board notified them that unless they gave us the telephone service free, we would charge them a license for using the streets with their poles, etc. The result of that was a very prompt notice from the company that they would charge us nothing further.

Mr. Kirkbride in his paper made one remark about the town of Palo Alto that I think it is incumbent upon me to modify. He intimated that the town was about to pass a discriminative license ordinance to keep out Redwood City merchants, etc. I think that is a great mistake. The matter has been agitated for some time. Those matters are always agitated in small country towns. The merchants who are not enterprising want to get some advantage over their more enterprising neighbors on the outside, and so they try to get a license of that kind passed. About five or six years ago that matter was canvassed by the merchants of Palo Alto, and it was brought up before the im-

provement club, and that is an organization which rallies pretty quickly to any popular measure, and at a meeting of University professors (we have thirty of them in our town alone), they announced that if that ordinance was passed, they would not patronize a single merchant in town; that it was un-American and was discriminative. We have never had any such thing adopted there, although it has been agitated by the merchants from time to time. I understand that they say that on the next election, they will make that an issue, and they will not allow any trustee to be elected who is against the proposition. Prof. Marx is one of the trustees whose term expires next April. I know what his idea is. He is perfectly willing to take up the issue, and he will go out of office if they can beat him. But they cannot do it; Prof. Marx will be re-elected. So Palo Alto is not quite so un-American as Mr. Kirkbride seemed to think.

MR. KIRKBRIDE—I place myself in error, and I will state that my information was from the Redwood City newspaper.

Mr. Mason brought up one matter in reference to our Western Union license there. I wish to say that the later decisions seem to me to be these: That if in any way we can distinguish the business of a company which is engaged in interstate business, whereby our tax is placed only upon such portion of that company's business as is local, and whereby we do not place any burden upon the interstate features of their business, then our license ordinance will be sustained. There are decisions in the United States courts to that effect, and also in the State courts.

Upon the other point that Mr. Mason raised, namely, the possible gaining of revenue from the use of streets, I will say that that has been under consideration some time by us, the circumstances being these: Our local water company (we have no municipal company) is a corporation which has its principal place

of business in another city. They refuse to pay a tax upon a franchise which has been in force for a number of years and which they have previously met without objection. The point which they raised was, that the franchise was taxable and taxed in the county where their principal place of business was, and therefore was not taxable in San Mateo. Many prominent attorneys hold that that contention is sound, that franchises must be taxed where the residence of the corporation is. I will say, however, that as a possible way of getting around the difficulty, our assessor, at my suggestion, has placed upon the assessment roll a tax against the company for the right of way over municipal streets. The company has its pipes laid through our streets. While we will not tax their franchise, we assess their right of way. They have not seen fit to pay the tax. I do not know how the courts will construe the matter. But it occurred to me as a suggestion worthy of thought.

MR. SPINNEY—Mr. Chairman, we brought the proposition up some six or seven years ago in the city of Fresno. We did not want to go to the expense of going into the United States courts, and we thought the best way was to tax their property high enough to make a license out of them. So we assess them for more than the other property is worth, and did not take anything by way of license. In that way we got our money and avoided a law suit.

MAYOR SNOW—The Secretary has asked me to relate the experience of Oakland concerning the special taxation of telegraph lines. It was, I think, something like six or seven years ago that the auditor discovered that in that year we would close with a deficit as things were going. Looking over the license law, we discovered that there was certain business concerning which an attempt had been made to obtain a revenue, but they were successful in standing off the license collector. So



an ordinance was written and passed by the Council charging the telegraph company a ground rent for poles, both the telegraph companies and telephone company. We went at the collection of the matter. We thought we might get considerable revenue from the yearly rental which the ordinance provided might be collected. We went into court with a case against the Postal Telegraph Company. They brought over into court in Alameda County a competent San Francisco attorney, and, much to our surprise, the attorney did not take the tack we expected him to take; he took one of our own employes and proved to the court that the city was using the poles, and that it had no right to levy a license upon a business, or declare that rent should be paid, for use of the ground occupied by the poles which the city itself was using. I stayed in court until that point was made, and then I went out. The point seemed to me to be pretty well taken.

Upon that trial it was admitted—I doubt if the attorney of that company would like now to say that he said any such thing—but it was virtually admitted that the company would be obliged to pay the ground rental to the city of Oakland, or close its office, if it desired to do so, of course provided they had not found this way out. It was discovered at the time that the license ordinance or the ground rental ordinance was passed, that it would be necessary to know the exact number of those poles, because the company would not come in voluntarily and state how many poles they had, and so it was provided that the poles should be numbered. Then if, for instance, we saw pole No. 560, we would know there were 560 poles. However, we have never required our city electrician to discontinue the use of those poles. We believe that we are getting a sufficient recompense for the use of the street because we are using the poles ourselves for our police and other wires. We, of course, have some poles of our own as

it is, and we are, as a city, endeavoring to get our own wires underground as fast as possible. But, not to let you go away with a false impression, I must say that we have got at least 100 feet now underground.

The reason why we in Oakland desire to increase our income by taxing the telegraph and telephone companies in this indirect way, by imposing a ground rent, is because the dollar limit of taxation does not, in our city, furnish a sufficient income to conduct the various departments of the city in a satisfactory manner. It was our own action, permitted by the Legislature, that gave us that limit, but at the present we have not sufficient money to run the city government without imposing licenses. There are some interesting figures of the report of the 140 cities of the United States that I commend to you, showing the amount of money collected by license tax, among other things.

Oakland's revenues from taxes is \$400,000 per annum. We have to have \$100,000 additional. If we had to raise all that by direct tax, we would be obliged to levy a tax rate of \$1.25, or \$12.50 on \$1000, instead of \$10 on \$1000, which is our present maximum rate.

I think perhaps some of our European brethren are better off in some of these respects, and that they understand these questions better than we do. They have got at the root of the matter. Are they not right in this matter in their plan of imposing a small tax on almost everything? A man cannot crook his elbow there inside the gates of their cities without having it cost him a little bit more than if he takes a drink outside. And I think a bottle of wine is just a little bit more expensive inside. Nobody notices it, and yet they tax almost everything there.

I agree most thoroughly with Mr. Kirkbride, though, that there should not be an imposition of a tax upon one

merchant or one profession and that tax not be imposed upon all others.

MAYOR SWEET—There is one little feature that I would like to hear discussed among the cities that have had some experience with it, and that is in regard to the social evil, the presence of bawdy houses, which require more police surveillance than even our saloons, where they bring in their liquors and sell them at midnight and after midnight. Is there any practical way of controlling that?

MAYOR SNOW—Mr. Chairman, no man can occupy the office of Mayor of a city about the bay, or possibly anywhere in California, without being called upon very early by a number of people who believe that no such houses as those just mentioned should exist in the city. And it takes lots of sparring to still retain the good opinion of those people and not consent to their going down town and cleaning those streets out. For my part, I think it would not be expedient to license houses of that sort in the city where I live. It would not do to come before the town with a statement that we licensed houses of this sort with a city like Oakland. What shall we do? If we hear of a house of that sort, shall we go down with banners flying and insist that every inmate leave? Where shall they go if they leave? Shall we drown them like rats? No. We cannot do that. There is no asylum for the women who are inmates. We have in Oakland made raids on that section of the town, and tried to clean it out. And with what result? Every lodging house is filled with them. So when the Chief of Police comes to me and says there is a house of that character at a certain place, I say to him, "Go and tell them to get out, and don't let them go up any further on that street than a certain house. Get them down below that and keep them in as small a space as possible. Then put your policemen there, and if you see any boys going in, send

them back home. If there is any liquor being sold and they do not take out a hundred dollar license, take them up to the City Hall before the Police Court." But it is not an open question with me any longer as to the shutting of these places. It is a serious question. The preacher, and the Sunday School teacher, and the Salvation Army must do their work, and the farmers themselves must teach the young and especially the boys who are leaving the farms and going to the cities. The social evil is one that we must individually realize and recognize. We cannot change human nature by police regulations. And if we try to break up the evil when it is concentrated in one portion of town, we will simply send them up town where they will do something worse. We are looking for light upon the question at the present time. But we cannot license them, and I do not think any city ought to, for that matter. I do think, though, that they ought to be under the eye of the police, and we should use our very best efforts to handle them for the best morals of the community, and that is what we are trying to do. (Applause.)



### Cement Macadam Pavements in Germany.

A recent issue of the *Centralblatt der Bauvering* described the the manner of laying cement macadam pavement in Leipzig. A six-inch foundation of sand and gravel or broken stone is laid, and this is covered with a wearing surface of small, hard, broken stone, with which cement has been mixed, a little sand being sometimes added. An idea of the estimation in which the authorities of that city hold this kind of paving can be had when it is known that in 1893 Otto Schulz of Leipzig-Plagwitz obtained permission to lay about 2400 square yards and the next year about 9,200 square yards and several areas of it in 1899.



## The Value of Municipal Libraries.

[An address delivered by Frederick J. Teggart, Librarian Mechanics' Institute, San Francisco, at the Annual Convention of the League of California Municipalities, Dec. 15, 1899, and the General Discussion thereon.]

WHEN MR. MASON called upon me to speak to you this evening on the subject just announced, he ran a very considerable danger of importing what might be called the Devil's Advocate in this meeting, because it would naturally be my business to do all the injury I can to the Free Public Library. However, I submerged my feelings.

To speak seriously of the municipal library, I think there is no subject of greater importance to the community in California and to which so little earnest attention has been given on the part of those who should pay attention to it, as that of municipal libraries. Yet the institution has been allowed to remain practically undeveloped in your midst. While throughout the states east of the Mississippi the free public library is looked upon as one of the most essential institutions, and while they take a pride in having handsome library buildings, the city of Boston spending three or more millions on the building for that purpose, in the whole State of California we have not one single library building erected by any city. There are a few library buildings, like that in Stockton and that in Redlands, originally the gift of some person. There ought to be more of similar buildings—we call them Carnegieries in the library business. Look at San Francisco. Her free public library is stuck up on the top floor of an out of the way wing of the City Hall, where it is inconvenient to the public, and I venture to say that there are thousands of people in this city who do not know where it is. It is not properly situated nor properly fitted to be of the educational advantage that a public library should be.

Speaking about the library movement: It is about eighty years since the first suggestion for the establish-

ment of a free public library, to be supported by taxation, was made. It took fully thirty years to get the first one established at Boston. Then after that it took fully twenty years to awaken the States of the country generally to the possibilities of the free public library. It was not until the centennial year that the real library movement began. And only within a decade have the Legislatures of the various states come to the conclusion that they should have something to say about municipal libraries. At the present time in ten or a dozen states there are library commissions appointed by the Legislature, entirely independent of the municipalities, to endeavor to expedite matters by getting libraries thoroughly diffused over the State. In one or two States the Library Commission is endowed with powers to compel municipalities to erect free public libraries within their borders. In States like Massachusetts and New York, no compulsory feature is introduced, but there is a large fund of money placed at the disposal of the Commission for distribution, in aid of libraries in the weaker towns.

California is pretty much on a par with all the Western States in library matters. She has not yet taken that position in that respect that she has in a great many other things. She has not yet, in the library sense, become the one progressive State west of the Mississippi River.

The possession and use of books will, I think, be acknowledged one of the most significant marks of the distinction between civilized and uncivilized people. The free public library is almost absolutely a distinctively Anglo-Saxon institution. There are no free public libraries in Continental Europe, in our sense of the term. The municipal library has been a growth rather than

the invention of the moment. The preliminary stages date back a very long time, way back in the Seventeenth Century, after the great revolution in England, when men saw the necessity of books. In the early days, however, the circulation of books was almost entirely among the better classes. But the suggestion of the time was not lost. In the cities, especially the larger ones, the booksellers found it profitable to supply books on much the same terms to people who were not members of the clubs controlling the libraries that the members enjoyed, and consequently they would rent out books for a small amount, or rather, they would sell a man a book and return him the larger portion of the amount paid for it when he brought the book back. That is the beginning of all subscription libraries. With the end of the Eighteenth Century, when the old world was being agitated by the French Revolution, another development took place, as is always the case along some line when a great political upheaval takes place. The workingman began to realize that he was an ignorant man, and the first associations of workingmen, other than the professional classes, were forming in England, and they were known to history as Mechanics' Institutes. The idea of those institutes was to engage people to instruct their people, and also to have money to buy books. Those institutions belonged entirely and exclusively to the mechanic and the artisan. And so the evolution of the idea went on, until it reached the point I have already mentioned.

Our argument for the establishment of free public libraries is precisely this: we provide for the people school education free. This we do to enable the common man to read. Our object is to put him in a position so that he may be what we call educated, that is, that he may read and write. We believe that the man who reads and writes makes a better citizen, a better neighbor, and a more clear-headed voter than the man

who is entirely ignorant. Suppose a man is able to read and write when he leaves school. What is he going to do with his ability? Not having the means to purchase books for himself, perhaps, the free public library must be at his hand, so that he may gather from that great storehouse of knowledge something which is of value to him. In point of fact, as Carlyle said, the free public library is the people's university. It is the place where the average man goes to get his ideas of development.

To accomplish the greatest good with the free public library, you require first and foremost, of course, books, but you most emphatically require also a suitable building for your books. You require, also, a librarian, one fitted for the work, and if you have not such a one, an incalculable amount of injury can be done. The librarian must be competent to refer the people to literature when they come into the building. In a village you want a librarian who knows more about books, probably, than any person in town. The librarian, in fact, ought to go to a special school or college for the purpose of being trained as such. (Applause.)

MR. KIRKBRIDE—Mr. Chairman, my attention has been called to this matter of libraries to some extent in the past through our own town experience. We began to feel the acute need of one something less than a year ago, and seven weeks ago we opened a public library with nearly five thousand volumes on the shelves. It has proved wonderfully successful in our judgment, and has really had a peculiar effect in the community. We considered our community not essentially literary before. We did not think they were people particularly interested in education, or the reading of books. But at the rate at which they have come forward to secure the privileges of taking out books and availed themselves of the privilege, we have reached a different conclusion. With something like two hundred cards



out, possibly only two or three cards would not be represented by volumes out of the library. We have at the present time placed books regularly in over one third of the homes in town, and that is the record of less than two months. In some instances we find that people come back two or three times a week for new volumes, and they are persons who attempt to read them and exhaust them to the best of their ability, showing that they are really vitally interested in the pleasures of the library. We may have stretched a point or two in law in order to get our board officially established, but there is now a public library maintained by the municipality.

In this connection I wish to call the attention of those present to the fact that the library law is very defective. It was passed in 1880, and in almost every instance where a city attorney attempts to examine its conditions and put it into effect, he is simply disgusted. It seems to be an absolutely unworkable law, especially when you go to work to start a library. If it is not entirely invalid, it is at least so nearly so that it is a stretch for a city attorney to permit his board of trustees to act under it. I will say that I prepared a bill which was introduced at the last session of the legislature, and it was approved in committee and called up on its second reading. I think if the people interested in the matter would continue to bear this matter in mind, we might possibly be able to get a new law through the legislature. It was with reference to that need for a new law that I particularly desired to address you.

MR. YORK—Mr. Chairman: upon the matter of the library law I have had the pleasure of examining it once or twice, particularly with reference to the times and modes of election of library trustees. I think you can construe it any way you want to. It is a difficult matter to construe it at all, properly. If I remember now, it provides for the election of library trustees in the same manner that other officers are elected. In the town

I represent, we have certain officers that hold for four years. The question is, whether the library trustee shall hold office for two or four years, or whether we ought to have them classified and one time and another. As I said before, I think you can take the law and put any construction you please upon it. The matter ought to be made plain and explicit. At present we simply allow the libraries to go along by sufferance and do all that we can to help them along. But if we were to attempt to follow the law, I think we would be in such a position that they would have to close its doors.

MAYOR SWEET.—I think the committee on legislation should take notice of the suggestions that have been made upon the subject.

MAYOR HUTCHINSON. I have no doubt we will have a convention at Sacramento at the time the next legislature meets, and if Mr. Kirkbride will present his bill, will try to put it through.



### The Use of Refuse as Fuel.

The following interesting letter from Mr. George Westinghouse, president of the Westinghouse electric and manufacturing company, recently appeared in the *New York Times*:

The bringing together of the gas and electric light and power interests in New York should result in great advantages to the public and to the interests so combined, provided the latest developments in gas and electric engineering are investigated and availed of. Among the numerous questions affecting the health, comfort and convenience of the citizens of New York (and of all communities in fact) are three of especial importance, viz.:

The disposal of garbage, the abatement of the smoke nuisance due to the increasing use of bituminous coal for steam power purposes, and the securing of an adequate supply of water.

From statistics there appear to be created daily in New York about 500 tons of garbage, or at the rate of one-

half pound per capita. Such garbage is about 20 per cent. carbon and 80 per cent. water. By a process which has been well demonstrated on a small scale, and which is being rapidly brought to a commercial basis, all of this garbage can be economically, and without offensive odor, converted into a fuel gas of great value. In the same apparatus and by the same process soft coal can be made into a gas suitable for power and heating purposes.

The fuel gas made from garbage and soft coal can be used to drive gas engines with electric generators, and the electricity thus produced can be used for light and to drive motors to the exclusion of the thousands of steam engines and boilers which make such demands upon the water supply, since the gas engine central stations can be so located that the water needed for engine-cooling purposes can be taken from the river.

Bearing upon these questions, and of especial importance, are the partially executed plans of the electric power and light corporations, viz: the Metropolitan, Third Avenue and Manhattan Elevated railways, and the New York Gas and Electric Light, Heat and Power company and the United Electric Light and Power company. If their present plans, which are fairly well-known to the engineering profession, are carried to completion, each will have one large steam station on the East river between Twenty-ninth street and the Harlem river, with about 75,000 horse-power of engines, boilers and electric machinery, making an aggregate of 375,000 horse-power, and which may be largely increased when the underground rapid transit railway is completed, and still further when the electric locomotive is used on all steam railways within the city limits.

If these corporations, which might as well buy electricity as the machinery, coal and water with which to produce it, were to unite in a common plan to provide the electricity needed in their

operations by the adoption of the best available methods, the saving to each in capital expenditure would be very great, and the decreased cost of their supply of electricity would make an important addition to their earnings applicable to the payment of dividends; while, most important of all the citizens of New York would have solved for them the garbage, smoke, and very largely, the water question.

I believe the contemplated plans of the corporations above named, which can be shown to be based upon an imperfect knowledge of the subject, will stand in the way of vast public interests, and, so believing, I have said to representatives of some of those companies that the near future would demonstrate the projected power stations and systems of electrical distribution incidental to the character of such stations, to be as far from the best as are the old cable systems for the propulsion of cars.

I write this letter because I believe these subjects are just now worthy of investigation, discussion and elaboration.

Dr. Carey T. Hutchinson of New York City, the well-known electrical engineer, replied to Mr. Westinghouse as follows:

"The letter from Mr. George Westinghouse calling attention to the great advantages that would accrue to the citizens of New York from the use of garbage as fuel, and to what he considers to be the 'imperfect knowledge of the subject' shown in the engineering plans for the large power stations, about to be erected on the East river, deserves some comment.

"Mr. Westinghouse estimates the amount of garbage available daily in New York City at about 500 tons. He implies that this amount of garbage converted into gas and used in gas engines would be sufficient to supply a material part of the output of the great power plants that he refers to. Experiments made in England based on the burning



in steam boilers of 26,000 tons of ordinary city refuse show that one pound of such refuse will make one pound of steam. On this basis, assuming the best engines and electric generators, twenty-five pounds of refuse would be required for each unit (killowatt-hour) output of electric energy from the power plant.

Mr. Westinghouse, however, does not propose to use the refuse for making steam, but purposes converting it into a fuel gas. He gives no data as to the value of the refuse used in this way, beyond the statement that 'all the garbage can be converted into a fuel gas of great value.' It is simple, however, to give an approximate idea of the possible limit to the efficiency of a process of this kind.

"Assuming the analysis of the garbage given—that is, 20 per cent. carbon to 80 per cent. water—the maximum theoretical heating value of one pound of refuse is very approximately 2,000 thermal units; if all this energy can be recovered in the form of a gas—that is to say, if the efficiency of the energy conversion from refuse to gas is perfect, and assuming a ratio of 20 per cent. between the energy in the form of electricity and the theoretical energy of the gas—a high figure—it would require 8.5 pounds of refuse per unit (kilowatt-hour) of electric energy. This figure fixes the maximum theoretical duty of a pound of such refuse when converted into a gas and used in a gas engine. It is not probable that the actual commercial duty of the process will equal fifteen pounds of refuse per kilowatt-hour.

"That is, a consideration of the elementary principles involved, shows a probable duty of fifteen pounds of refuse per unit (kilowatt hour) in comparison with twenty-five pounds, deducted from extensive tests on steam. This difference represents the possible improvement due to the use of gas engines.

"Assuming then that a unit of electric energy can be obtained from fifteen

pounds of refuse, the 500 tons would yield about 67,000 units. As Mr. Westinghouse truly says, the aggregate power of the large steam plants mentioned is approximately 375,000 horsepower. The daily output of these plants will be approximately 2,500,000 units; in other words, the maximum result that could be got from the consumption of all the garbage of New York City in the way that Mr. Westinghouse describes, would supply about two and one-half per cent. of the daily output of power from these stations alone. This is so trifling that it is hardly worth consideration, not being even sufficient to drive the pumps and auxiliary apparatus in the various power houses.

"Looked at from another point of view, the daily demand for power from these stations will call for the consumption of nearly 3,500 tons of the best coal. Mr. Westinghouse proposes to use 500 tons of refuse to do the work of 3,500 tons of good coal."



### Street Fountains.

To break up the monotonous angularity of streets I suggest that a fountain be placed at street intersections, around its base a bank of flowers, then a broad walk and trees around the circle and seats under the trees. I would repeat this place of rest so often that one would not be out of sight or hearing of the fountains at any point on the street. Between the fountains, if necessary to give variety and add interest to the street, I would place monuments, statues or other decorative works, and surround them with shrubbery and flowers. A scheme of this kind offers a chance for a variety of treatment and is feasible in the most densely populated districts of a city. Think of a fountain with trees and flowers and comfortable seats in tenement districts, opening up to these neglected parts of the city places where the bright sunshine might penetrate and flowers and shade and running water cheer the inhabitants.

Every city has acknowledged the necessity of doing something to improve the tenement district by tearing down blocks and turning those places into parks. But it is very expensive. For this reason breathing places and gardens—beautiful and comfortable places for the poverty-stricken, hard-working and weary inhabitants of over-crowded tenements—are largely unavailable by those who most need their benefits. At the cost of one of these parks—which wipes out of existence scores of dwelling and business buildings, and with them all the revenues to city and individuals—and without interfering with business or the sacrifice of a tenement, whole tenement districts could be made to blossom as the rose in spots if not within sight of each other, at least within easy walking distance from one to the other. It is good business as well as good health and good morals to make the lives of the working masses as comfortable as possible. And it is also good politics; for rest and revolution are born of the unbearable miseries and neglect of the laboring masses, whose only argument for redress of grievance is force.—From "Municipal Aesthetics" in Municipal Affairs, suggested by George E. Bissel.



### The Proposed Amended Street Law.

BY JOSEPH HUTCHINSON.

The committee appointed at the December meeting of the League, after considerable correspondence, called a regular meeting at San Francisco, for February 26, 1900. Commencing on that day, the committee held almost daily sessions, for over two weeks.

#### OBJECTIONS TO THE PRESENT ACT.

The objections to the street law as it exists to-day were quite fully and clearly brought out in the discussion at the League. They are, briefly, as follows:

- 1 The arbitrary protest tends to stop all work;
- 2 The length, expense and uncertainty of litigation;

- 3 The collection by the contractor puts upon him all the risks and consequently increases the average cost of street work from twenty-five to thirty-three per cent;

- 4 The front foot assessment plan, without reference to benefits, is unjust and of doubtful constitutionality;

- 5 The publications required are too lengthy and costly.

#### THE AIM OF THE COMMITTEE.

The committee in its work has aimed to meet all of the above objections. At the same time, it has been fully mindful of the dangers attending a sudden and sweeping change of law on so important a subject. The Vrooman Act has been in force for fifteen years, and, having been the source of a great deal of litigation, much of it has been construed.

It has seemed unwise to deviate from the Act more than was absolutely necessary. The committee has endeavored to keep as close to the provisions of the Vrooman Act as possible. And where changes have been made, the committee has sought to follow plans which have stood the test of both the courts and practical use, either in this State or other States.

#### ALL THE LITIGATION CONCENTRATED.

The Act which has been drafted by the committee for submission to the legislative bodies and the attorneys of the municipalities of the State, prior to presentation at the next annual convention of the League, recognizes that all street assessment work is sure to be fruitful of litigation. It aims to concentrate this litigation at the beginning of the proceedings, so that no work shall be undertaken until the proceedings upon which it is founded have been tested in the courts and confirmed. This plan has been in force in Illinois for many years. A similar plan worked successfully under one of the early charters of Los Angeles. The theory is also embodied in the Wright Irrigation Act



and has been sustained in that connection by the courts.

#### THE COUNCIL HAS THE INITIATIVE.

When street work is proposed, the legislature body of the municipality refers the matter to the City Engineer. The City Engineer investigates the matter thoroughly, determines the district which he believes will be benefited, makes a map showing the outside lines of the district also all the subdivisions within the district as they appear from the last Assessment Roll; also the dimensions and areas of all the subdivisions and the names of the owners, so far as he can determine them; also his estimate of the benefits which will accrue by reason of the proposed work to each subdivision.

This map, together with his report and recommendation, is filled with the legislative body. The legislative body then considers the matter and rejects or adopts, modified or otherwise, the recommendations of the Engineer, and then refers the matter to the City Attorney.

#### AN ACTION IN REM

The City Attorney then files in the Superior Court a petition in a proceeding *in rem*, entitled, for instance; Riverside County vs. Local Improvement District No.

The petition sets forth that the work is necessary. This gives all property owners an opportunity to take issue on the necessity of the work and furnishes what is equivalent to a protest, but not an arbitrary protest.

The petition, also alleges the taking of all the preliminary proceedings according to law. This enables property owners to put in issue the regularity and validity of every step in the proceeding up to the time of the filing of the petition.

The petition prays that, after due notice and hearing, the assessment be confirmed, unchanged or modified, as the Court may determine. The map, report and recommendations of the en-

gineer are attached to the petition and filed with the Clerk of the Court.

#### NOTICE TO THE PROPERTY HOLDERS.

As soon as the petition is filed, the Court fixes a day for the hearing of the same, and directs notice to be given, similar to the notice in a probate or admiralty proceeding. The Clerk publishes notice of the hearing, and also posts large letter notices, like those required by the Vrooman Act, in conspicuous places along all the frontage in the district. The notices describe, in general terms, the character of the work proposed, and require all parties interested to appear, at the time and place named, and show cause, if any they have, why the proposed assessment should not be confirmed.

#### EVERY ONE HAS A DAY IN COURT.

At the time named, any one interested may appear and file objections. Any one not satisfied with the amount assessed against his piece may, by depositing enough to cover the costs, demand a jury trial and have the benefits assessed as in proceedings in eminent domain. Dissatisfied contestants may appeal, but their appeals do not stay the whole proceedings, but only postpone action as to the particular tracts involved. After the proceeding in the lower court and all new trials, appeals, etc., are ended, we have a final decree, which establishes the validity of the assessment. The litigation is over once for all.

#### BIDS ON A CASH BASIS.

The judgment of confirmation entered, a writ is issued to the Tax Collector, who names a day for sale of the respective pieces for the respective amounts assessed. Some will pay voluntarily, before sale; others will let their property go to sale. The cash paid in voluntarily and the receipts from the sales go into the treasury, to a special fund provided for the particular district. Any one, who does not feel able to pay the total amount of the as-

assessment against him, in cash, may, upon filing with the Clerk an agreement waiving all defects in the proceedings and consenting to their validity, have his time extended ten years, at a rate of interest not to exceed seven per cent, and a bond is issued against his piece, the bond turned into the treasury and sold for cash. No contract for any work, or part of any work, is let until sufficient cash is in the treasury; so that all bidding is on a cash basis, and the best possible prices will be obtained for the public. The contractor takes no risk, except such litigation as may arise by reason of his improper execution of the work, and such litigation cannot be avoided by any statutory provision. The installment extension plan is taken from the law of Iowa. It is not unlike the plan already existing in the present Vrooman Act.

#### PROCEEDINGS MAY BE WAIVED.

The proposed Act provides that, when the legislative body takes the first steps toward any public work, the property owners may avoid all proceedings by paying into the treasury the amount of the proposed assessment, or doing the work themselves, under proper restrictions. In many cases, particularly of small jobs, this provision will avoid all Court proceedings.

#### THE SPINNEY PLAN.

In order to meet the views put forward by Mr. Spinney of Fresno and endorsed by his city, and also by Tulare, Visalia, Merced and other small towns, the Act provides that the legislative body of any municipality may, in the last month of any fiscal year, adopt a preliminary estimate of the local improvements which they shall deem necessary to carry on during the next ensuing fiscal year, and an estimate of the expense thereof, and thereafter, when levying the tax rate for the next ensuing year, they may include in the levy an additional rate to cover said estimate, and said additional rate shall

be levied and collected like other taxes of the municipality, and the proceeds thereof placed in a special fund and used only for the municipal improvements designated in such preliminary estimate above provided for; said additional rate may be in excess of the maximum rate of taxation now permitted by law to be levied upon any such municipality, but shall not exceed —cents on the one hundred dollars of the assessed valuation of the property within the municipality.

It is believed that this provision will have very extensive application in small cities and new cities. It was not deemed wise to attempt to apply it to all cities, as it would meet with serious opposition in the larger municipalities, where expensive permanent improvements have already been made.

#### APPLICABILITY OF THE PROPOSED ACT.

It is doubtful to what extent the Courts will hold such an Act, as that proposed by the committee, applicable. Under the recent decision of the Supreme Court in the case of *Byrne vs. Drain*, filed February 27th, 1900, ("California Decisions," Vol. XIX., page 97), it is held that, under the amendment of Section 6, Article II of the Constitution of this State, made in 1896, the street law provided in municipal charters, but suspended by operation of the Vrooman Act, is revived. It is impossible to tell, at present, how far-reaching this decision is, but in all probability it will remove all municipalities, having charters containing special street laws, from the operation of such an Act. And it is not impossible that the principle upon which that case is decided may be so broad as to render unconstitutional any municipal street law passed by the Legislature of the State. If this latter proves to be the fact, it will be useless to pass the proposed Act. But the work of the committee will not be in vain. Each municipality will then have to provide its own Act, and, in all probability, the suggestions of the com-



mittee will prove very valuable in that connection.

#### PROGRAM OF THE COMMITTEE.

The first drafts of the proposed new Act will now be circulated among the members of the committee for criticism and amendment, and, when a final draft is agreed upon, copies of it will be printed, under the resolution passed at the special session of the Legislature, at the request of the Secretary of the League. Printed copies will then be sent to the legislative bodies and attorneys of all the municipalities in the State, and suggestions invited. Later, all the suggestions will be considered again by the committee and embodied in ultimate recommendations, which will be laid before the convention of the League next December.



#### Concerning Electric Lighting Contracts.

A short time ago the Secretary of the League addressed a circular letter to the members of the Engineering Committee, suggesting that a little advice would be appropriate concerning the proper form for specifications to be adopted by cities upon which to base electric lighting contracts. The members of the committee residing near San Francisco, Mr. Grunsky, Mr. Frost and Mr. Moore, held a meeting and considered the subject with the result stated in the communication below of Mr. Moore. Mr. Johnson gave his views at length and Mr. Olmstead in a short communication virtually agreed with the others.

Mr. Johnson's letter is as follows:

"As stated, it is not possible to accurately measure the candle power of the so-called 1200 or 2000 c. p. arc lamps, that c. p. varying with the angle of elevation of the lamp. For this reason the term 1200 or 2000 c. p. lamp is indefinite and *should not be used*. I would substitute for it a clause requiring a current strength of not less than a

age of not less than a specified standard at the lamp, and require it to be maintained from the time of starting up and during the hours of lighting. A few years ago Philadelphia required 9.6 amperes and a voltage of 47, not less than these. Testing stations may be required in each circuit and provision made that lights not up to standard as specified may be rejected and corresponding reductions made from bills.

"The above requirement means a meter measurement. Such a method is definite and fair. It makes it to the interest of the company to keep the lamps up to c. p., and also serves to keep down the number of dead lamps.

"I think a contract should be for a certain number of hours per year and have a schedule attached showing how those hours are to be divided between the different days. A moonlight schedule commends itself to me for smaller places, as it seems folly to attempt to improve upon the work of a full or nearly full moon, and there is a resulting economy in its use. The specifications might be (1) Location of lamps. (2) Lamps erected and to be erected. (3) Current strength. (4) Testing stations. (5) Kind and care of globes. (6) Unsatisfactory lamps changed. (7) Limit number of lamps to capacity of dynamo. (8) No other attachments in same circuits. (9) Erection, position and maintenance of lamps satisfactory to proper official. (10) Schedule and deductions for bill. (11) Failure of lamps for specified time to work a forfeiture of contract and bond. (12) Change of location of lamps. (13) Bond. (14) Bids on forms furnished. (15) Certified check with bids. (16) Right of rejection."

Yours very truly,

JAMES JOHNSON, Riverside, Cal.

The following is the views of the remaining members of the committee:

Regarding the matter of a general form of contract for regulating the furnishing of electric lights to municipali-

ties, the committee has it under consideration, the members residing in this part of the state having met at the office of the chairman, Mr. Grunsky. It is hoped that at some time not far in the future the committee will be able to make a formal report, but to accomplish this will take a little time. I have read the communication of Mr. Johnson and think most of his suggestions are good. As my personal opinion as far as I have investigated the matter, it seems that electric current should be sold by meter measurement. At a convention of the National Electric Lighting Association it was decided that a lamp consuming 450 watts should be rated as a 2000 candle power lamp. It was the opinion of the committee which then reported on the matter that lamps should not be rated by candle power at all, but as this method of rating was in such general use, and as specifications as are now written call for lamps of a certain candle power, it was thought advisable to establish some definite measurement for such rating. The measurement above given of 450 watts is at the lamp terminals. Consequently it does not include any line resistance or losses of any kind between dynamo and lamp. This has been, I think, the general basis upon which contracts have since been made. This corresponds to 9.6 amperes and 47 volts. No service of this kind under any form of contract can be satisfactory at all times without inspection. It would seem then that,

1st, the current consumed should be paid for by measurement.

2d, that the contract should limit the loss between meter and lamp to a proper percentage.

3d, that a periodical inspection should be provided to secure the fulfillment of the contract.

Yours very truly,

C. E. MOORE.

### New Electric Light Carbons.

It is stated that a proposition will be made to this city to furnish it free of charge with a certain amount of a new kind of electric light carbon, so that tests may be made and the advantage of using them, if any there be, may be ascertained. The carbons are the invention of Frederick Hackman of St. Paul, formerly of this city. It consists of a carbon tubing filled with calcium carbide powder. The effect, it is said, is the production of a light of at least eight times the brilliancy of the ordinary carbon. Mr. Hackman has tried to introduce this carbon in St. Paul, and the board of public works of that city has favored his idea to the extent that in advertising for bids for electric lighting it has specified his carbide carbon. The council also adopted the views of the board of public works in this respect. The proposition was that the company which furnishes the electric lighting for the city of St. Paul should furnish the current, meters should be supplied to determine the amount of current used, and that the company should be paid in proportion to this amount. The claim was made that the calcium carbide carbon light required a considerably smaller amount of current, as demonstrated by tests, and that a great saving would be made by the use of the new carbons. But the electric company, it is stated, claimed that by using the new carbon and having the current measured by meters it would be unable to run its plant at a profit, because the amount of current to be furnished by it would be smaller on account of the saving of the current.—*Electrical World and Engineer.*



The Iowa League of Municipalities has a committee at work drafting a street improvement law which is to be submitted to the next legislature.



The League of Wisconsin Municipalities has under consideration the issuance of a quarterly publication devoted to municipal affairs.



## California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.  
B. F. LAMBORN, - - - - - Business Manager.

Office of Publication, Room 11, Eighth Floor, Mills Building, San Francisco, Cal.

Subscription Price, - - - One Dollar a Year.

There are still a few cities and towns in the state that have not as yet become members of the League of California Municipalities, and to those we once more extend a cordial invitation to identify themselves with a movement that promises more in the line of securing enlightened administration of municipal affairs than any heretofore inaugurated. Co-operation and combination appear to be the necessary basis for our present industrial, social and political life. The individual units engaged in productive industry are fast uniting into one active, aggressive organization and the individual who refuses to become a part thereof is crushed out of existence. Nations are forming their alliances, and the isolated government that holds aloof from the political compact, marks itself for a coming slaughter.

The movement to unite the municipalities has precedents on all sides. They are kindred organisms. They exist by virtue of the same creative power; they have the same desires, and the same power to satisfy those desires. "In unity there is strength." This old adage needs no exemplification. Two individuals working co-operatively will accomplish more than will the same two individuals working apart.

In view of what has been accomplished by other combinations, it would be strange if like results were not brought about through the mediumship of an organization of municipalities. The fact might be plainly stated: A

municipality can not afford to be outside of the organization any more than a big manufacturing establishment can afford to be outside of a trust.

We trust that the officers of cities not yet belonging to the League will not be indifferent to this movement. It means much to their cities in the near future. There is no limit to the good that may be accomplished by intelligent co-operation. Every one of the one hundred and eight municipalities in the state should be enrolled. Don't put it off any longer. Every city has received an invitation to join. In a few cases, perhaps the person receiving the invitation has neglected to present it to the Town Board or Council. Perhaps it has been referred to a committee and the proposition is "hung up." At the next meeting of your Trustees, you who have not taken any action upon the matter, call for report, or make a motion that your city join the League of California Municipalities.



Special attention is called to the communication in this issue of Mr. Hutchinson, chairman of the committee to frame a new street law. He has set forth the main features of the proposed act and it would be well for all those interested to consider very carefully all the points recited. Very few will fully appreciate the difficulties in the way of framing this law and criticism ought to be charitably bestowed. It is very easy to criticise, but much more difficult to construct something above criticism. Yet it is a matter which should receive the fullest discussion, and the pages of this magazine are open to any and all for this purpose.



The municipal elections of all sixth-class cities will soon take place, and perhaps the results will be that some of our official friends will be translated to

the sphere of private citizens. We wish that it would not be so. We have formed an attachment for these men who have been unselfishly devoting their time and talents for the public good, and appreciate them more probably than do their constituents, for we realize the burdens that they are compelled to bear. The average voter has no comprehension of the task of municipal administration and places no value upon the experience acquired from years of public service. If he did we would have a higher order of local government, and our faithful servants would remain at their posts of usefulness. But there is no disgrace for an upright and faithful public official to be beaten at an election. The disgrace is upon those who are the instruments of his defeat.



If this paragraph should catch the eye of some philanthropist who would like to endow some worthy institution, the suggestion is made that a gift of a library of works on municipal affairs tendered to the League would prove highly acceptable. The idea would be to maintain such a library at the League headquarters, where municipal officers throughout the state could send and obtain the loan of them. Such a library would be of great benefit to every one interested in municipal affairs.



With pleasure we note that C. S. Brooks has been re-elected Mayor of Marysville without opposition, thus testifying that the people of that city appreciate the services of a faithful and progressive official.



During the past month we have received letters from the secretaries of eastern Leagues of Municipalities welcoming the California League to the fraternity of municipal organizations

and expressing a desire to co-operate in every way possible.



The experiences of most cities with the new election law will probably be such as to generate a stronger feeling for municipal home rule or anything that will put us beyond the reach of continual legislative tinkering.



C. W. Finch, superintendent of streets of Riverside, spent two weeks in San Francisco during the past month, and put in the time on the new street law, he being a member of the special committee for the purpose of construction of such a measure. His experience with the Vrooman Act has been very valuable to the committee.



Nearly all commodities used by municipalities have advanced in price from 25 to 50 per cent within the past year and taxpayers who would like to experience a reduction of their tax bills will consider themselves lucky if they do not have to stand a raise.



The Pacific Coast Iron Pipe Combine has collapsed and the prices of pipe have dropped about 30 per cent. The drop may only be temporary and cities desiring pipe should lay in a supply.



There is a decided tendency on the part of cities having municipal water supplies to adopt the meter system. The rates then are uniform and there is no tendency to waste water. Owing to the cost of meters the system should be put in gradually.



A city attorney of repute has suggested that the delegation of powers by the legislature to city boards and councils to fix official salaries is unconstitutional. This is a matter to be looked into with a view of correcting the error, should there be one.



## What the Cities are Doing.

Pomona is to try sprinkling with oil.

Chico is talking about a sewerage system.

Santa Cruz is considering the beautifying of the beach.

Redlands has adopted an anti-expectoration ordinance.

Yreka will sell \$70,000 water works bonds on April 10.

Benicia has contracted for a new hose house at a cost of \$500.

Livermore will vote on the question of reorganization on May 14.

Visalia is considering the issuance of bonds for a high school building.

Palo Alto has voted \$20,000 worth of bonds for a high school building.

Santa Monica will vote on "license" or "no license" for saloons on April 9.

Kern City is considering the proposition of trying oil for street sprinkling.

Napa has imposed a license tax on keno games to the amount of \$10 a month.

Pasadena has decided to call for an election of Freeholders to frame a new charter.

A new seawall to cost about \$5000 is to be built along the water front of Sausalito.

The Vacaville *Reporter* is urging the construction of a sewer system for that town.

Santa Ana is preparing to augment its water supply by boring additional artesian wells.

Oceanside has let a contract to sink additional wells in order to increase the water supply.

The Trustees of Selma are furnishing eucalyptus trees free of charge to be planted on the streets.

Hollister has accepted a deed to the library building tendered by the Mechanics Library Association.

Riverside will vote on the question of issuing \$40,000 four per cent bonds for an auxiliary electric lighting plant.

The city of Oakland has appropriated \$2500 in order to sink new wells and test the same on the Roberts ranch, for the purpose of determining whether or not the supply of water will be sufficient to supply the city.

Pleasanton's water works bonds to the amount of \$20,000 will be on sale on May 14th.

Sacramento has passed an ordinance prohibiting the granting of saloon licenses in residence districts.

The San Leandro Board of Trustees at its next meeting will award a contract for furnishing fifty street lamps.

The Ladies' Improvement Club of Healdsburg has presented the town with a marble drinking fountain.

Eureka is making progress towards public improvements including sewerage system, water works and light works.

Monrovia has voted bonds to the amount of \$20,000 for the purpose of extending its water system. The vote stood 154 to 16.

The design of Modesto's new high school building has been published and has a substantial and handsome appearance.

Santa Clara has sold \$30,000 of gas works bonds to Hecht Bros. & Co. The premium given was \$1,506.25—a trifle over five per cent.

The City of Pasadena has called an election for April 11, at which time the proposition of issuing sewer funds to the amount of \$178,400 will be voted upon.

Visalia has levied a quarterly license on newspapers of \$2.50. The papers will probably respond by an increase of rates for public printing and advertising.

San Jose has purchased the electric tower that has been a land mark for the town for many years past. The lights from this tower can be seen from all parts of the Santa Clara valley.

The San Francisco Board of Supervisors will soon start an investigation looking towards the acquiring of its public utilities. The matter to be determined is whether water or light should come first.

The new municipal water system at Lakeport has now been in operation six months, and is being operated satisfactorily, paying all expenses and the water rates are very low, even for a public system, the household rate being 75 cents a month.

The committee appointed at Redlands to investigate the matter of securing a municipal water supply after six months of study has made a report. The substance of it is that an adequate supply within the means of the city has not yet been found. The committee was continued and will investigate further.

Santa Ana will have a new high school building.

Gilroy has increased the rate of saloon licenses from \$60 to \$600 a year.

Santa Barbara is to have a new high school building to cost \$60,000.

Petaluma is considering the advisability of adopting a freeholder's charter.

Bakersfield is studying the sewerage question with a view of installing a complete system for the city.

National City has purchased a city hall, for \$1500. The building was already constructed and cost new \$6,000.

A mass meeting of the citizens of Martinez was recently held and it was decided to request the Town Trustees to institute bond proceeding by which it is desired to raise \$25,000 for street improvements.

Redwood City has made a contract with the Peninsula Lighting Company to furnish power at the pumping station of the city's water works, with which to operate the pumps; also to furnish current for the electric lamps. The town expects to effect a saving of \$85 monthly by this means.

A private corporation has applied for a lease of the Palo Alto municipal light works and promised to give cheaper service. The Trustees claim to be able to produce electric current at the low cost of seven cents per Kilowatt, and will refuse to make a change until it is demonstrated that the private company can do better.

Placerville is about to resume its functions as a municipal corporation. In 1863 the city issued bonds in aid of the construction of the railroad. The railroad was not completed until a few years ago and the city considered the obligation violated on the part of the railroad company and refused to pay the bonds. In order to avoid a judgment against the city all of the city officials resigned and for many years there has been no election held. The Governor has now appointed a commission, consisting of Chas. A. Swester, Prentiss Carpenter and Fred Irwin, who will call a city election.

### Vallejo Water Rates.

The city of Vallejo, which owns its own water system, has fixed the following annual rates:

For one family in a house of three rooms or less, \$4; each additional room up to ten, \$1.20; each additional above ten, \$1; for each addi-

tional family 75 per cent additional to above. Closets, pantries, falls and bathrooms are not counted as rooms. Bakeries, \$20; barber shops, one chair, \$5, each additional, \$2; public bath tubs, \$10 for first and \$5 for additional; breweries, \$36 to \$100, or by meter; butcher shops, \$10 to \$20; hotels, \$1 per room; laundries, \$20 to \$100; offices and sleeping rooms, \$3 to \$8; saloons, \$10; restaurants, \$10 to \$30; shops according to number of hands, \$10 to \$50; irrigation, 3c per square foot; street sprinklers, 10c per 1,000 gallons; stables, \$1.50 per horse, \$1 per cow; steam engines, 1 to 10 horse-power, \$5; each additional h. p., \$2; stores of 25 foot frontage, \$6; 25 to 50 feet, \$10; professional offices, \$5; blacksmiths, one forge, \$4; each additional, \$2; meter rates, families using less than 3,000 gallons per month, 45c per 1,000; other than private families, 15c per 1,000 gallons.



### Pumping Without Power.

A Blade reporter visited the ranch of Henry Pankey on West street today where some experiments and tests are being made with the new pumping system recently patented by A. Reynold of this city. The apparatus is called the Automatic Vacuum Pump and while it is yet in the first stages of development is already demonstrated to be a marvelous invention with unlimited possibilities. No motive power is used. The vacuum is produced by an explosion of gas in a large cylindrical tank, driving the air out through exit valves and the water at once rushes to the vacuum. A float is so arranged within the tank as to open an air vent at the proper time and allows the water to escape by gravitation. As the water flows out, the air and gas flows in, and at the proper time the explosion is repeated. The apparatus when in action handles a tremendous volume of water without power or friction and almost without machinery.—*Santa Ana Blade.*

### More About Wax and Gum Treated Fire Hose.

Among California cities and towns using the Wax and Gum Treated Fire Hose described in our issue of October last may be mentioned Oakland, Berkeley, Santa Rosa, Ukiah, Tiburon, Vallejo, Stockton, Salinas, Merlo Park, Redwood City, Groves, Woodland, San Pedro, Oxnard, Pacific Grove, Lakeport, Santa Clara and Santa Ana. Chief Ball of Oakland recently tested some of this hose which had been two years in his service and gave it a pressure of 400 lbs. per square inch without bursting or sweating it. This is pretty good proof of the makers claim that the Wax and Gum Treated Cotton does not rot.

This hose is sold by the New York Belting & Packing Co. Ltd., whose advertisement appears in another column.



## Recent Court Decisions.

A very important decision was handed down by the Supreme Court on February 27, which will go far towards establishing the proper construction of Section 6 of Article XI of the Constitution and its effect in restraining the legislature from passing general laws in relation to municipal affairs. The cause was entitled *Byrne vs. Drain*, and was an action to restrain the Superintendent of Streets of the city of Los Angeles from selling certain lands for the non-payment of certain costs assessed against the same for opening a street.

The proceedings undertaken by the city was in pursuant to the provisions of the general law enacted in 1889. Prior to the passage of the Act the city of Los Angeles had adopted a charter wherein provision was made for the opening of streets. According to Section 6 of Article XI of the Constitution, all cities and the charters thereof were "subject to and controlled by general laws."

The court holds that the enactment of a general law concerning the opening of streets did not operate to *repeal* the provisions of the city charter, but merely *suspended* their operation during such time as the general law remained in force.

When Section 6 of Article XI was amended in 1896, by the injection of the words, "except in municipal affairs," so that it read "Cities and towns heretofore or hereafter organized, and all charters thereof framed or adopted by the authority of this constitution, *except in municipal affairs*, shall be subject to and controlled by general laws," the effect was to exempt all cities having charter provisions on any municipal subject from being controlled by general laws, and such charter provisions were thereby revived and made operative. The opinion was written by Justice Henshaw and was concurred in by all of the other Justices.

The effect of the decision may be far reaching. The cities of this State have three kinds of charters. First, those whose charters were granted by special act of the legislature prior to 1879; second, those having Freeholders charters; third, those whose charters are contained in the general municipal incorporation Act of 1883. The first class includes the cities of

Marysville, Nevada City, Santa Cruz, Salinas, Santa Clara, Gilroy, Livermore and half a dozen others. The charters of these cities, probably without exception, contain some form of a street improvement law. It would seem clear, therefore, that these cities are not subject to the general law in respect thereto and the so-called Vrooman Act does not apply to these cities; nor can the legislature pass any law on that subject that will apply to them. All of the larger cities of the State, San Francisco, Oakland, Los Angeles, etc., to the number of about fifteen, have Freeholders' Charters. Some of these charters contain street acts and some do not. Those having them are not subject to general laws. Those which have no detailed provisions for street work, nevertheless have authority in some general terms to provide for the improvement and maintenance of streets. And a nice question remains to be hereafter determined as to whether or not these cities will be subject to general laws. Much will depend upon the language of each individual charter upon this subject. In the case of *Fragley vs. Phelan*, three of the Justices of the Supreme Court said that where a charter is silent in respect to any municipal affair, then the general law will govern in respect to such affair. This, however, is not the opinion of the Court. Furthermore, the question may be asked: "What constitutes silence?" When a charter provides that a city may provide for the improvement and maintenance of public highways, does not that give to a city the right to provide the method of doing the same? If this question be answered affirmatively, then the present street laws would be operative in scarcely a city in the state. The question is of sufficient importance to warrant a test case being brought to determine the same.



In the matter of *J. T. Murphy on habeas corpus*, the Supreme Court has decided that the ordinance of the city of Vallejo is valid which prohibited gaming, under which the defendant was convicted for playing keno, and that the ordinance is not in conflict with Section 330 of the Penal Code.



Judge Budd of the Superior Court of San Joaquin County says a franchise is taxable by the city in which it is granted and is not assessable at the place of business of the corporation.



# CALIFORNIA MUNICIPALITIES

VOL. 2.

San Francisco, July, 1900.

No. 6.



MAGNOLIA AVENUE, RIVERSIDE.

## TO CITY OFFICIALS.

Cities whose book-keeping systems are inadequate for the purpose of showing the detailed expenditures of each and every department at any and all times, are respectfully invited to correspond with the Secretary of the League of California Municipalities and secure the information that will accomplish the desired result. Address

LEAGUE OF CALIFORNIA MUNICIPALITIES,  
Room 14, 8th Floor, Mills Building, San Francisco.





Jackson's Electrical Vertical  
Centrifugal Pump.

# JACKSON'S

High Grade

## Pumping Machinery

Efficiency the Highest.

Largest Pump Manufacturers on the Pacific Coast.

Centrifugal Pumps specially adapted for City water works.

Compound Pumps for supplying water under pressure for hydraulic mining.

Special Centrifugal Pumps for raising water 400 feet.

Gold Dredging Pumps in stock for any requirement.

## Byron Jackson Machine Works

Corner 6th & Bluxome Sts., S. F.



38 SPECIAL—32 WINCHESTER

## Smith & Wesson Military & Police Revolver

Perfect Workmanship — Accurate—Reliable—

Adopted by Police Forces—Recommended by U. S. Government Inspectors. Catalogue on application to

**SMITH & WESSON, Springfield, Mass.**

San Francisco Branch, 159 New Montgomery St.

## Expert Municipal Accountants.

BOOKS EXPERTED,

UP-TO-DATE SYSTEMS INAUGURATED,

INSTRUCTION GIVEN.

Address \_\_\_\_\_

## “California Municipalities”

Room 14, Eighth Floor, Mills Building, San Francisco.

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 2.

San Francisco, Cal., July, 1900.

No. 6.

## California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.  
B. F. LAMBORN, - - - - - Business Manager.

Office of Publication, Room 14, Eighth Floor, Mills Building, San Francisco, Cal.

Subscription Price, - - - One Dollar a Year.

## CONTENTS.

### COMMENT:

A Special Tax for Improvements.....	171
The Value of Annual Reports.....	172
Alameda's New Charter.....	173
San Francisco's Opportunity.....	174
Publicity of Public Service Corporations .....	174
The Relation Between the Geology of the Sources of Water Supply & Disease .....	175
Purification of Sewage.....	179
Annual Report of the Merchants' Ass'n.....	180
Monrovia's Water Regulations.....	181
Successful Operation of Healdsburg's Water and Light System.....	184
Chicago Wants to Own Street Railways..	185
Oil for Fuel.....	185
The City Shares Corporation Profits....	185
Tar Macadam Pavement.....	186
A Contract Annulled.....	186
The Example of Some Towns.....	187
Excerpts from Mayor Martin's Message..	189
Recent Court Decisions.....	190
League Notes.....	190
What the Cities are Doing.....	191
Index to Vols. 1 & 2.....	192

## COMMENT.

**A Special Tax for Improvements.** The San Francisco *Examiner* approvingly comments upon the suggestion made by this magazine last month to the effect that the law should be changed so as to permit the levy of a special tax wherewith to make specific public improvements. The *Examiner* outlines the plan as follows:

"We would not, however, give the right to the Supervisors to make such a levy. We think that extraordinary expenses of this sort should not be incurred without consent of the people.

"We would suggest that the public interest would be served by arranging the financial provisions of the Charter thus: Give the Supervisors power to levy a tax of, say, not exceeding 90 cents on the \$100 for running expenses; to levy a tax of 10 cents for a Public Improvement Fund, and also to permit the Supervisors to put into this fund whatever money they could save from the 90-cent levy for expenses; and finally, empower the Supervisors to propose to the people a special tax for a specific purpose, not to exceed 25 cents per year on the \$100 for not more than two years, this tax not to become valid until approved by a majority of the



voters voting thereon at a general or special election.

"We think that such provision would give flexibility to the finances of the city and at the same time prevent extravagance. The Supervisors would be limited to a reasonable sum for ordinary expenses. They would have power to spend from \$400,000 to \$500,000 a year for permanent improvements; and they could, with the approval of the voters, raise \$1,000,000 to \$2,000,000 for a specific improvement without a bond issue."

There ought to be no objection to the above plan. In order to make it applicable to municipalities operating under general laws the legislature should pass a law providing,

1. That the legislative body of a city should first cause plans and estimates made of the proposed improvement at least thirty days prior to the fixing of the tax levy.

2. State the amount to be expended on the improvements each year during which the proposed special tax is to be levied.

3. Submitting the proposition to the voters, a majority to decide the question.

4. Requiring that the revenue thus authorized shall be used exclusively for the proposed improvements until the same shall have been fully completed.

With a tax levy of this kind it would be possible to make a certain class of public improvements without the necessity of resorting to a bond issue. It would come handy in carrying out a complete system of street improvements.



**The Value** During the past month the of Annual towns of Palo Alto, Liver-Rooms. more, Redwood City and Vacaville have got into line with the improved system of bookkeeping rec-

ommended by the League and next year we shall expect these places to issue an annual report that will be valuable to themselves and other towns. No report is of real value unless the expenditures are properly segregated and carried out in detail. And this reminds us that during the past year but three annual reports reached this office that were of any practical value and these reports came from Pasadena, Modesto and Santa Clara. Other cities may possibly have issued them, but in most instances no complete reports were made. We have about thirty cities engaged in conducting light and water works in this state, and it is important to know how economically or otherwise these works are conducted. Municipalities will continue to be charged with un-business-like methods until such time as they can make public reports and account for every dollar expended. Statistics are valuable for comparison. Here is an instance: A certain municipal water system in this state expended as much to pump 200,000 gallons of water a day as did another municipal system to pump 400,000 gallons a day. If the reports of these two systems could be compared it would have probably disclosed a case of good management on one hand and of loose management on the other. Very likely the difference would be shown in the full accounts of the two systems. An investigation would have further showed a very uneconomical lot of machinery in the smaller plant; possibly also the fuel used was not the cheapest obtainable. Discoveries of this kind cannot be made without comparisons, and comparisons cannot be made without annual reports.

Here is another illustration of the value of reports: The League's Bureau of Information recently had an inquiry for the cost of street sprinkling in vari-

ous cities. Circulars were sent out and up to date but two intelligent reports on the subject has been received. It might be very beneficial for one city to know the cost of street sprinkling in other cities. The city that pays the highest cost per mile would very likely try to make a better showing next year. Thus it would be in every department.

In the East there are many who advocate a State supervision of municipal accounts. We hope that state interference with municipal administration will never be necessary, but it will be necessary unless the municipalities will concern themselves in the matter. City Councils and Boards of Trustees should require a detailed annual report, which should be printed for the benefit of the public. And the bookkeeping system of each city should be such that the expenditures for each class of service would be clearly shown.



**Alameda's New Charter.** The Board of Freeholders of the City of Alameda has completed its labor of preparing a new charter for that city, and the instrument is now ready for submission to the electorate. A study of this proposed charter reveals no features that are out of the ordinary, except that the initiative and referendum are given a limited application therein.

The general plan is almost identical with most charters in this state, that have been recently adopted, and all the mistakes made by charter-makers in recent years appear to have been stubbornly adhered to. It has a divided responsibility to a considerable extent, though the mayor is given considerable power, having a veto over ordinances and the power of appointment of all heads of departments and the power of suspension. The practical operation of this scheme will be that the mayor will

make enough enemies during his term to prevent his re-election and the city will continually be cursed with an inexperienced general manager.

We do not know what motives may have actuated the Freeholders in adopting the ward system, unless they were ward politicians and desired a field in which to exercise their political power. Certainly, there is no reason to support the ward system and numerous reasons can be urged against it.

But the most serious mistakes made were those adopting as a part of the charter the so-called Vrooman Act and the general laws in reference to street closing, municipal elections and the bond act of 1889. This was a plain case of shirking responsibility on the part of the Freeholders. It was "so easy" to say that in these matters the municipality "should be governed by general laws," while to have designed something original would have required considerable effort.

If the Freeholders had made much of an inquiry in cities which have made the "Vrooman Act" a part of their charters, they would have discovered that no street work of importance has been done for years. In San Jose, Stockton, Napa and several other cities all street work is "hung up" on account of the uncertain and complicated provisions of the general laws. Besides, the constitutionality of the "Vrooman Act" has been seriously questioned. It is probable that an entirely new act will be passed by the next legislature, but if Alameda adopts its proposed charter it will be precluded from operating thereunder. We will have the spectacle of a city endeavoring to act under a law that has been repealed. The same remarks can be applied to the adoption of the bond act of 1889. The article on bonded indebtedness is all right excepting the last clause which adopts the act



of 1889. If that had been left off, it would have been possible to issue short term bonds; now there can be nothing less than forty-year serials.

Furthermore there is a mass of details incorporated in the charter that is unnecessary, confusing and sure to be productive of litigation. The attempt is made to lay down a system of book-keeping and certain things are required to be entered on the stub of a treasurer's receipt. The system of duplicate receipts now used in most cities evidently was not thought of.

But why go on? It is probable that the "new" charter will be adopted. The word "new" has always a glamour about it that carries the idea that it is "improved." The charter-makers were men of eminence in the community and the average citizen will say: "They ought to know what they are doing," and their influence will carry the thing at the polls.

Truly, the proposed charter is not as good as is the present one.



**San Francisco's Chinatown?** "What shall be done with Chinatown?" This is a question propounded these days in California's metropolis. It is alluded to as the "plague spot" of the city, not particularly because there was—or wasn't—cases of the bubonic plague there, but because the district is filthy, wretched and generally unsanitary physically and morally.

What shall be done with it?

Make it sanitary.

How?

How was it that the cities of Manchester and Birmingham converted large areas from being unsanitary slums into handsome, modern tenements with wide streets, well lighted and cleanly?

Find out how it was done and then do the same in the plague infected dis-

trict of San Francisco. It is a nuisance as it now exists. Cannot an action be commenced to have the territory in its existing condition declared a nuisance? Isn't there legal power to have a nuisance abated? Can't the city buy the land? Certainly. It can make a park in Chinatown as well as in the white residence portion of the city. The people would vote \$20,000,000 to buy Chinatown if necessary. It would be a good and paying investment for the city to buy it outright, tear down the old shacks and erect modern tenements. San Francisco is deficient in modern tenements.

If you wait until the present owners abate the Chinatown nuisance, there will be a good many plague scares before it is done.



**Publicity of Public Service** "Publicity" as a means of offsetting the increasing tendency in favor of municipal ownership is being talked of by those who desire to continue the operation of public utilities by private corporations. By "publicity" is meant that all public service concerns should furnish complete and truthful reports of their operations—tell just how much their stock has been watered, precisely how much their operating expenses are, how much for salaries, how much for repairs, for betterments, how much the income, and then submit to a scale of rates that will allow only a reasonable profit on the actual capital invested.

It is to be confessed that "if" this could be done, much of the complaint against this class of corporations would be abated. The theory seems very pleasing, and there are a great many good men who think that this "publicity" can be secured.

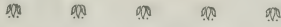
We don't. Because it would have to be the result of voluntary effort on the

part of these corporations. There are already plenty of laws requiring such public reports and the laws cannot be enforced. A few corporations make truthful reports. Such as do are not seriously complained of. The others—well, we can't tell whether they tell the truth or not.

It is very doubtful if there is a single corporation having "watered" stock that would confess the fact. If it should, and a schedule of rates fixed on the

basis of paying a "reasonable" profit on its actual capital invested, the result would be disastrous to the stockholders. It would be about as serious as "confiscation" by reason of municipal ownership.

We have not yet become so Utopian as to believe that "publicity" is a practical scheme. It may be an engaging theme to talk and write about, but its utility ends with the half-way reformer.



## The Relation Between the Geology of the Sources of Water Supply and Disease.

Read before the Technical Society of the Pacific Coast. Published in Journal of the Association of Engineering Society.

BY MARSDEN MANSON.

**D**URING the past few years the writer has had occasion to visit various parts of California, and the idea presented itself that it might be desirable to ascertain as far as possible certain facts with regard to the water supply and filth diseases of the various towns. Time did not permit of gathering more than a general idea of local conditions, so the opportunities for getting detailed or extended data were not favorable. The main impressions derived from these notes are presented now in crude form with the hope that interest may be awakened in the subject and that other members of the profession may extend this examination. At some future time the writer may be able to give the results in more detailed form and to present features which can not now be discussed.

The mode of procedure was simple, and consisted in an examination of the supply, closely questioning those in charge and visiting and questioning the local physicians, who in all instances gave valuable information. To these gentlemen, and particularly to the the physicians, the writer is much indebted. It soon became apparent that there was a certain recurrence of spec-

ial types of disease in widely separated localities, and that some similarity in the water caused this recurrence. Certain diseases not especially recognized as water borne were first noted. Water-borne diseases are notably from organic contaminations, and sewage influences dwarf all other sources of contamination; yet the cumulative effects of mineral impurities can not be neglected.

The geology of the source determines the nature of these impurities, and influences the mode and rate of organic contaminations; it therefore becomes an important factor in water supply. It has long been known that a deficiency of bicarbonate of lime in domestic water was not desirable for infants and growing youth, which deficiency has to be remedied by the addition of lime-salts to give sufficient material for bones and teeth; also that this water was desirable for adults and elderly people; instances of this are Portland, Ore., and Glasgow, Scotland. An excess of this salt can readily be utilized or eliminated in youth, but induces certain diseases of the joints and urinary organs and the desposition of



lime in the tissues in middle and latter life.

Between these wide extremes there are many delicately balanced conditions not always readily recognized, but becoming apparent after long use when carefully studied. In many parts of California water is too dear a necessity to criticise from a sanitary standpoint, unless it is so dangerous as to cause an excessive death rate; and even then most communities are content to await the fortunate return of favorable conditions rather than incur any expense in correcting the evils. Again, the diseases are sometimes so insidious that they become apparent only to the observing physician of long practice. Interesting instances of this will be given later.

It will be necessary also, before taking up special types, to refer to the very marked difference between the Sierras and that of the Coast range, and of the influence of this difference upon the water from each. The Sierras are principally granites, syenites, the harder slates, silicious rocks and insoluble lavas. The Coast Range is composed of much softer rocks, which contain more soluble mineral matter, particularly salts of magnesia, soda, lime, alumina, etc.

The differences are further intensified by the greater precipitation upon the Sierras having leached out the soluble salts and cut down the streams into harder materials. In each range there are also localities which partake of the nature of the other; thus the northern and central groups of the Coast Range are granitic and yield waters resembling those of the Sierras, and portions of the Sierras yield waters in which there is an abundance of mineral salts.

The differences in geological formation give rise to marked differences in the waters from the two ranges, those from the Sierras frequently having as low as five or six grains of mineral matter to the gallon and those from Coast

Range sometimes contain ten to forty times this amount.

Apart from organic contamination, these latter waters, when highly charged with mineral salts, produce after long use certain types of malnutrition and indigestion, inflammation of the kidneys and bladder, and if deficient in lime, as is sometimes the case, young people, and even children, lose their teeth.

This latter trouble was particularly noted in Ownes Valley, where on one side water fairly abundant in lime occurs and on the other side its place is taken by soda, magnesia and alumina, like some of the Coast Range waters. The dentist practicing in this region gave it as the result of years of observation, that his practice was principally confined to middle-aged and elderly people on the side of the valley in which salts of lime occurred, but embraced children as young as thirteen years of age on the side in which lime was deficient.

A similar water was encountered in Vacaville. One of the physicians here, upon being asked about the types of disease incident to the water supply, at once came to the defense of the locality as regards malarial troubles, and fully explained that the few cases occurring were due to special conditions or were "imported;" but when asked regarding the occurrence of kidney or bladder trouble, of which he had had severe cases, admitted that he could account for some of these cases only upon the assumption that they were due to the continuous use of water containing an excess of the salts of magnesia, soda, alumina, etc., and to the weakening of these organs in eliminating these salts.

Water from shallow deposits of quaternary and recent gravels and soils are always dangerous; not by reason of their soluble salts, but for the ease with which these formations permit organic contaminations to pass through them. It does not matter at what elevation above tide they occur, distinct types of

disease follow them, partly due to the two causes above mentioned. In low elevations malarial fevers predominate. In elevated regions this takes the form known as "mountain fever" the two being so far as the writer can determine, analogous.

In some instances, as in many of the foot-hill towns, the purest and best of water is turned out from the streams of the high Sierras and conducted along slow-flowing ditches in surface soils and stored in shallow surface reservoirs of recent geological formation, and hence favorable to organic contamination. The result is that persistent cases of low gastric fevers and diarrhea occur every autumn, due directly to organic contamination, but augmented by geological formations traversed and utilized. This is the most universal type of abuse of good water that one comes in contact with throughout the state, except the direct contamination of the soil adjacent to surface waters used for domestic purposes.

It is very difficult to convince the general public using these supplies of the evils of these contaminations. No more fertile field is open to the engineering profession than a systematic endeavor to bring before the people simple and practical means of correcting these gross violations of the laws of cleanliness and health. The degree of ignorance and prejudice to be encountered is great, and to be successfully overcome will need the aid of the universities and of the legislature.

Water from deep gravel and sand is generally free from dangerous organic impurities, but is likely to be heavily charged with mineral salts; where a change has been made from one source, surface supply, to deep strata or artesian water, a change in health has occurred. An attempt was made to trace the effect of this change through the introduction of these diseases incident to an increase of mineral matter, but this attempt was not successful, although two localities were found where

the conditions might be considered favorable. Full data for the determination of this interesting point are not now available, and the scattered data which could be given would probably be misleading.

The kindred subject of the great improvement of health by the introduction of better water supply, was frequently noted, but is foreign to the immediate subject of these notes.

A marked instance of the influence of the geological formation in affording very favorable conditions for correcting the effect of contamination was noted in Chico.

The case was simple enough when once traced, and really amounted to nothing more than changing the intake of a pipe above the source of contamination, which, if occurring above ground, would be considered a simple and common-sense remedy; but occurring in this case underground, in a slow-flowing, broad stratum of water, in coarse sand and gravel, and having caused years of sickness and a rich harvest to the medical profession, it becomes of more than passing interest. Besides, it affords a valuable lesson to those whose stupidly set notions will not permit a proper regard for the health of a community to interfere with their income.

The town of Chico is situated on the east side of the Valley of California, near the base of the foothills. The valley slopes gently to the west. The soil is sandy loam, under which exists a gravelly stratum carrying an excellent quality of water, easily tapped by reason of its uniform distribution, and affording, by reason of the simplicity of the formation, ready means of disseminating contamination.

The water supply was, until some years since, obtained by tapping this stratum at the western or lower edge of the town and pumping it into elevated tanks, from which it was distributed by pipes. Fecal matter was, and is now, disposed of in pits sunk into the porous soil, and when full or clogged up, a new



pit was dug adjacent to the old. To such an extent has this been carried that in some back yards nearly every spot has been contaminated.

As a natural result the water supply in the stratum below become grossly contaminated, and for years the health of the town was extremely poor. The death rate was not abnormally high, but the occurrence of insidious forms of gastric diseases was excessive. One physician stated that his monthly cash receipts were about \$1,800, besides accounts, which were slowly collected or delayed indefinitely.

Finally the intake of the water works, or the pump, was shifted to a new well on the eastern or upper side of the town, and these diseases disappeared as if by magic. The physicians whose monthly receipts were \$1,800 had a decrease which reduced him to \$800 a year, although he still attended the same percentage of sick which he previously had, only the number of patients which required the attention of the medical profession was reduced by eleven out of every twelve sick. This, as partly explained above, was due to the simple expedient of changing the intake to a point above the contamination, but, being underground and out of sight, it took years to convince the people of the necessity of the change, and in the meanwhile thousands of cases of sickness occurred each year for the want of common-sense view of the geology of the locality and its influence on the rate of pollution of the water supply.

The geological formations of the great valley of California are very interesting to study, especially in their influence upon the water supply.

The strata of this valley are complex, and are only known from the deep borings made in groups, particularly in the southern half. These when platted show that there is a semblance of stratification, and that the strata alternate in clays, sands, gravel and even cobblestone.

This depression in the crust is filled up in places for more than half a mile with these alternating layers. An approximate estimate of the volume between bedrock and the 400-foot contour above sea level shows that certainly four, and probably six or eight, thousand cubic miles of material has been denuded from adjacent water sheds.

The borings into these strata yield waters of very widely varying character. Those near the surface are generally dangerous, from organic contaminations. Those from a few hundred feet below the surface are ordinarily good.

From depths of a quarter mile, or even less, they are some times charged with mineral matter to such an extent as to render them unfit not only for domestic purposes, but even for irrigation. At these depths, however, they hold another ingredient, light carburetted hydrogen, in such abundance that it is collected as natural gas in Stockton and Sacramento, and largely controls the price of fuel and light in these cities.

A very abundant class of waters can not be more than briefly referred to, namely, "mineral" waters. These are numerous, and of great variety; some highly valuable for medical properties, others useless, or even dangerous. The springs occurring along the great fault from Kern county into Nevada and Oregon, and others near faults or recent lava outbursts, are frequently hot or boiling. They are sometimes charged so highly with mineral matter that their use, except for periodic bathing, is limited. All of their ingredients and temperatures are controlled by the geological formations in which they occur. The general conclusions were that not only do the geological conditions influence the medical value of waters, but that they have a deeper interest to the engineer in that they directly and indirectly influence the sanitary value of the water. *Directly* by charging the water with small quantities of certain salts injurious to the human system

when continuously used, and by the absence of salts of lime, depriving the system of an ingredient needful in early life. *Indirectly* by affording conditions which render organic contamination more or less easy to accomplish.

These conclusions, it may be said, could not have been predicated before and for any area, but their local application over so broad a field as California is an interesting and useful study. It is by no means as important as the removal or suppression of organic impurities, but it is nevertheless an issue of considerable moment and one the engineer cannot afford to overlook.



### Purification of Sewage.

#### *City Government.*

In a paper read before the Pennsylvania Municipal League, which recently met at York, Pa., Mayor Giles described the sewage disposal plant now used in his city—Altoona, Pa. He said in part:

We believe we have the sewer disposal problem for our city solved. Altoona is situated at the foot of the Allegheny mountains, we have no rivers or large streams passing through or near our city, only a shallow creek about ten feet wide. For years our sewage has been flowing into the creek, and the city has been sued by almost every farmer along its course, and damages were awarded from time to time. Holidaysburg took up the matter and we were compelled to dispose of our sewage in some other manner or pay heavy damages. We then decided to build filtration beds.

Our system is the intermittent filtration system—we have the largest plant in the United States, and the only plant in this state except a small one at Wayne, Pa. Our plant is successful in disposing of the sewage of Altoona. It has been in operation almost four years and, I believe, this spirit of filtration could be used successfully in all our third-class cities and towns, which

would purify the water of our rivers and streams and bring them back to a state of almost primitive purity. What are intermittent filtration beds and how do they dispose of sewage and purify it? These beds are constructed in a highly scientific manner and it is interesting to know that through this system of filtration, the black, filthy sewage that flows from these beds disappears from view with all its vileness and fifth with millions of disease germs and reappears again at the west ends of the beds flowing out of an eighteen-inch pipe, transformed into water as clear and sparkling as a mountain stream. I have seen persons drink this this sewer water and taste it, and say that it was free from any taint and it is claimed that this water is pure enough to be used for domestic purposes. The city engineer called my attention to the fact that the men working on the filter beds in August of last year, used this water for drinking purposes in preference to well water situated on the city farm.

The plant is situated four miles from Altoona and was constructed at a cost of ninety thousand dollars. It comprises sixty-seven acres of sandy, stony land. The land was graded and leveled and around the sixty-seven acres was erected a three-foot embankment, which is sodded and presents a neat appearance. These sixty-seven acres were then sub-divided into forty separate filter beds, by three-foot embankments. From four to six feet beneath the surface of these beds is a series of small tile drains all leading into a large single iron pipe, sixteen inches in diameter, through which the sewage flows off the beds into the creek clear as a crystal.

The sewage passes through a screen tank before it enters the beds and all solid matter, tin cans, paper and such material, is not allowed to pass on the beds. By the time the sewage is carried three and one-half miles through the pipes to the filter beds, all the



solids are broken up. A line of pipe is laid around the beds and lead into each bed through a gate chamber which can be opened or closed at the will of the attendant.

To illustrate, we will now turn sewage on bed No. 1 until the bed is covered to a depth of about three inches. This requires two or three days' time, then the valve is closed and no more sewage is allowed to pass on the bed for two weeks. During this time the sewage sinks into the sand a depth of two or more feet and a jelly is formed and the bacteria—minute living organisms—adhere to the sand and begin their work of eating up and destroying all the live matter and nothing is left but the clear water to filter out through the underground tile into eighteen-inch pipes which empties into the creek.

It is not the sewage filtering through sand that does the purifying or destroying of organic matter; it only rests the sewage in the sand, while the bacteria do the work of eating up the organic matter. If the beds were hard clay the water could not percolate through the soil and would decompose on the surface and create offensive odor. If you were to take a barrel of sand and pour water into it, the water would come out of the bottom of the barrel clear but not purified from sewage filth. If you were to let the water stand in the sun a stench would arise from it, but, if a school of bacteria was started in the barrel, you would find the water that you would filter through the barrel would then be clear and free from organic matter. Our record of August shows by a mistake the operator turned on the sewage into one of the beds twice within a week, we found that the sewage filtered through the beds and passed into the stream. A white fungus started to grow upon the rocks in the bottom of the stream and the water was not purified—we claim that the bacteria failed to do their work because they were overfed—that is the reason we allow a bed to stand two

weeks and further that the mere fact of the sewage filtering through the sand does not destroy the live germs of the sewage. There is very little odor arising from the filter beds unless such material as offal from slaughter houses pass through the screens and get onto the beds. The filter beds are farmed and we have raised several crops of good corn and vegetables, such as cabbage, celery, beets, potatoes, onions, etc. By farming the beds the soil is kept in a loose and porous condition. It requires only one attendant to operate the beds, and the expense of keeping the filter beds in repair is very small.

There are several kinds of sewage filtration systems, the chemical system, coke and septic tank, the merits of which I am not familiar with. We believe after four years of practical use, the intermittent filtration system is a perfect system of sewage filtration.



### Annual Report of the Merchants' Association.

The merchants' Association of the City of San Francisco has just completed the sixth year of its existence and its record of public service has been one to be proud of. It has interested itself in securing many public improvements, correcting abuses in municipal administration and in the introducing of improved business methods in city affairs. It has prepared and had adopted by the municipal authorities improved specifications for street sprinkling, cleaning and paving, has encouraged the repaving of the principal business streets.

The program for the coming year embraces a continuation of the projects previously undertaken and such new ones as may be hereafter suggested. The conveying of the street sweepings to Golden Gate Park, the flushing of asphalt streets at night time, the placing of electric wires under ground, the construction of public comfort stations, and the fostering of the city's trade and commerce.

The membership continues to increase and now numbers 1200.

**Monrovia's Water Regulations.**

The city of Monrovia has recently established a new schedule of water rates for its municipal system, together with a set of rules regulating the supplying of water. They will be found interesting and are herewith published:

The monthly rates to be collected by the city of Monrovia for water supplied from its system of water works, to consumers, shall be as follows:

Section 1. For tenements and dwelling houses, occupied by a single family, 60 cents, and for each additional family 30 cents, or 12 cents per 1000 gallons, measured by meter.

Sec. 2. Each family paying the 60 cent monthly rate shall have, free of charge, water for sprinkling lawns, gardens and flowers, on a lot 50x160 feet, upon which said family resides, to be run through a spray, sprinkler, or half-inch nozzle only. There shall be charged in addition to the rates above provided, 60 cents for each and every additional lot 50x160 feet, water to be run through a half inch nozzle, or spray, only.

Sec. 3. For restaurants and boarding-houses 60 cents to \$3.00.

Sec. 4. For hotels \$1.25 to \$6.00.

Sec. 5. For stores, shops and warehouses, from 30 cents to \$1.25.

Sec. 6. For bath tubs in bath houses 30 cents for each tub.

Sec. 7. For one horse or cow kept for private use, including water for washing vehicles, 12 cents. Each additional horse or cow 6 cents.

Sec. 8. For livery, boarding, feed and hack stables, including water for washing vehicles, \$2.25 per month, or 12 cents per 1000 gallons, to be measured by meter to be furnished by consumer.

Sec. 9. For bakeries, including water for use of one family when residing upon premises, \$1.25.

Sec. 10. For barber shops, for each chair, 30 cents.

Sec. 11. For each steam engine, for each horse power, 30 cents.

Sec. 12. For building purposes, for each 100 yards of plaster, 20 cents.

Sec. 13. For building cement walks, for each 100 square feet, 15 cents.

Sec. 14. For building cement curb, for each 1000 lineal feet, 25 cents.

Sec. 15. For each 1000 brick laid, including wetting of brick and slacking lime, 15 cents.

Sec. 16. For butcher shops, confectionery shops, halls, photograph galleries, printing offices, book binderies, and for all other purposes not included in the above or hereinafter provided for 60 cents.

Sec. 17. Laundries, greenhouses and railroads, using water, and all persons having reservoirs, having connection with the iron pipe lines, shall be governed by and charged the following water rates, to-wit: For each 1000 gallons 12 cents; water to be measured through a meter to be furnished and put in by the aforesaid designated parties using the water, under supervision of the marshal or water overseer.

Sec. 18. No irrigating, other than as provided in Section 2, shall be permitted from the iron pipe or domestic system, except under the supervision of the marshal or water overseer, and under the following rules:

Rule 1. Each irrigator under said system shall pay for the use of water at the rate of 2 cents per inch per hour, an inch meaning statutory miner's inch.

SEC. 19. Water for irrigation other than above provided shall be under the control and management of the Board of Trustees of the city, and shall be distributed in rotation under the regulations to be by them established from time to time, and shall be sold and furnished to consumers at the rate of 50 cents for twenty-five inches miner's statutory inch per hour, or at a proportionate price for a larger or less volume of water, or for fractions of an hour.

Sec. 20. The Board of Trustees reserve the right to install meters and



charge meter rates to any consumer, when, in their judgment, an equitable distribution of water cannot otherwise be made.

Sec. 21. All rates, except meter rates, are due and payable in advance at the office of the city clerk, and meter rates are due and payable at the end of each month excepting that a deposit be required thereon, not exceeding three-fourths of the estimated quantity of water used.

Sec. 22. The city shall charge and collect in advance for each tap and attachment hereafter made with its system of waterworks, as follows: For each one-half inch gate valve, using one-half inch pipe, \$3.50; for each three-fourths inch gate valve, using three-fourths inch pipe, \$4.00; for each one inch gate valve, using one inch pipe, \$5.00. And there shall be a stop-cock in every attachment on the sidewalk, just inside the curb-stone, at a point to be designated by said city, or elsewhere at a point to be designated by said city, which said stop-cock and its box shall be supplied by the city, and shall be for its exclusive use and under its exclusive control. The city shall not be responsible for damages to any buildings or their contents from any break beyond the street service box; and water consumers are hereby required, for their own protection, to provide at their own expense another stop-cock to be placed at the first suitable joint beyond the stop or service cock of the city. When more than one service pipe is supplied from one attachment there shall be as many protection stop-cocks as there are service pipes.

Sec. 23. No consumer of water from the city, or any other person, shall under any circumstances run any water from his service upon any other lot or property for which he is not paying the rate or rates prescribed by said city.

Sec. 24. Nothing in this ordinance shall be so construed as to prohibit any consumer of water from sprinkling any street passing any property for which

he is paying the regular water rate as prescribed by said city from said property to the center of said street, provided said sprinkling is done during the hours and under all of the restrictions of this ordinance.

Sec. 25. No pipe connections for domestic use shall be made with any main either in the streets, alleys or elsewhere larger than three-fourths inches in diameter, nor with a hydrant larger than one-half inch; and all connections now existing shall be reduced forthwith to the above sizes, such changes to be made under the supervision of the marshal.

Sec. 26. The following rules and regulations for the government of consumers of water are hereby adopted:

Rule 1. In all cases in the non-payment of water rates prescribed by said city, within five days after the presentation of a bill therefor, the supply will be cut off. When the supply has been cut off for a violation of any ordinance or rule of the city it will not be turned on again except upon the payment of the amount due, together with the additional sum of \$1.

Rule 2. Consumers shall prevent all waste of water.

Rule 3. In watering trees and for all other purposes not otherwise provided for, the water must be carried in a hose and in no case in a ditch; and some competent person must be kept in attendance during the time the water is thus used, in order to prevent waste.

The water will be immediately shut off for a failure to comply with this rule.

Rule 4. In all cases where water is to be supplied to several parties or tenants from one connection or tap, the city contracts with only one of said parties; and on failure to comply with these regulations and pay the rate, the connection will be cut or water turned off, as may be deemed right by said city.

Rule 5. All consumers of water must keep their service pipes, fixtures, stop-cocks and other apparatus (but not the service put in and owned by the city),

in good repair, and free from leakage, at their own expense, and they will be liable for all damages which may result from their failure to comply herewith.

Rule 6. The collector or any other authorized officer of the city shall be admitted at all reasonable hours to all parts of the premises supplied with water to see that the regulations are observed.

Rule 7. No person except an authorized agent of the waterworks shall turn the water on or off from any building or premises.

Rule 8. No person shall tap any water main or in any manner whatever meddle or interfere with any part of the waterworks of the city without the written permission of the Board of Trustees.

Rule 9. Faucets at wash-basins, water-closets and urinals must not be left running.

Rule 10. No person or family supplied with water by the waterworks of said city will be allowed to use it for any other purpose than that reported to the city in the application for water, without first having obtained the consent of the Board of Trustees, nor in any way to supply water to other persons or families.

Rule 11. All faucets, hose, sprinklers, nozzles or other continuous streams must be shut off promptly upon the alarm of fire; the water not again to be turned on until the fire is known to be extinguished.

Rule 12. No person shall place on or about any hydrant or stop-cock connected with the pipes of the waterworks of said city any building material or other obstruction, so as to prevent free access to the same.

Rule 13. The city will not be responsible for the breaking of any pipe or service cock, or for any other interruption of the supply of water by reason of the breaking in machinery or stoppage for necessary repairs.

Rule 14. The city reserves the right at any time to shut off the water in

its mains for the purpose of repairs or extensions, or for other purposes; and all persons having boilers within their premises not supplied with or by tanks or cisterns, but depending upon the pressure of the pipes to keep them supplied, are hereby cautioned against danger of collapse.

Rule 15. The right is reserved, and it shall be the duty of said city to amend add to or revise these rules and regulations and rates as experience may dictate.

Rule 16. Water rates will be charged for premises vacated, in every instance, and until the city shall have been notified of the discontinuance of the use of water, and to turn the water off.

Rule 17. It shall be unlawful and a violation of this rule and ordinance, for any consumer to use water for sprinkling, spraying or watering trees, flowers or lawns, at any other time of day than as follows: From the first day of May to the first day of October following; between the hours of 5 p.m. and 7 p.m.; and from the first day of October to the first day of May following; between the hours of 4 p.m. and 6 p.m.

Rule 18. Water for irrigation shall be furnished only to lands under the pipe system of the city through which the water shall be run, and then only for lands upon which the water shall be used.

Rule 19. The maximum time per acre for which a head of 25 statutory miner's inches of water will be delivered to consumers shall be one and one-half hours.

Rule 20. Any person, firm or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction in a court of competent jurisdiction shall be fined not less than \$1.00 nor more than \$50.00, or by imprisonment in the city jail not exceeding twenty-five days, or by both such fine and imprisonment.

GEO. O. RENNER,  
City Clerk.



## Successful Operation of Healdsburg's Light and Water System.

The new water and light system has now been in operation for several months and an idea can now be had of its operations.

President Pyne of the Board of Trustees recently submitted a report of operations of the system covering the month of May. His report is as follows:

"I think it is right to make to you and to the tax-payers of the City of Healdsburg a statement of what the water and light plant is doing. I feel that it is my duty to do this, as I promised the voters of the city at the time of the bond election that if they would vote the bonds and the plant was put in, it would pay the expense. But in the statement then made the cost of what the city would receive in lights and water was figured as part of the income of the plant, and it is right to include this, as it would not be right to have those of our citizens who are using the lights and water pay that which the city receives, and which is for the benefit of all. This I think should be paid by a tax on all, as all receive the benefit of the street lights, City Hall lights, the Plaza, and the fire protection, and water for sprinkling the streets; so in this statement I have included all of these things as part of the income of the plant. I include two statements: One of the expense—what the city paid for lights and water to the old light and water companies for much poorer service than the present, when the lights went out at midnight. We then had 13 fire hydrants; we now have 43, and can reach any house in town, and you all know that before there was much of the town we could not reach with water.

The other statement is what the service we now receive would be worth and what we would have to pay for it if we bought it from a private company.

In the first statement I have taken the figures from the city books of just

what we did pay, as far as I could. In regard to the water for streets, as we now put on with one man as many or more loads than we did before with two, I think it fair to charge the time of one man and team to the cost of pumping the water, which at \$2.50 per day would be \$75 per month.

### INCOME.

Sale of water and lights, May, 1900....	\$672 93
Street lights as paid old company....	63 00
Lights in City Hall, Gas Company....	25 55
Fire hydrants, as paid old company.....	13 00
Water for Plaza.....	20 00
Water for streets.....	75 00
Water for City Hall.....	2 50

Total.....\$871 98

### EXPENSE.

Bonds and interest.....	\$495 83
Salary superintendent.....	120 00
Salaries two station men.....	100 00
Salary pipe inspector.....	10 00
Salary line man, \$1 per day.....	26 00
Keep of horse.....	16 00
Water janitor.....	15 00
Repairs and incidentals.....	20 00
Salary collector.....	35 00

Total.....\$837 83

Balance of profit.....34 15

### STATEMENT NO. 2.

Sale of water and light, May, 1900....	\$672 93
31 street lights all night at \$7 per light,	217 00
60 City Hall lights.....	20 00
43 fire hydrants at \$1 each.....	43 00
Water for Plaza at 1-4c per square yard,	15 00
Water for streets.....	72 00
Water for City Hall.....	2 50

Total.....\$1,042 50

Expenses per statement No. 1.....837 83

Balance profit.....\$236 00

I congratulate you on the success of this plant, as I think that no plant can make a better showing for the short time it has been in operation, and the plant has not yet reached its full capacity.

The members will notice that I have not included in the expense account anything for a sinking fund to renew the plant as it shall give out. I think this very important and something this Board should provide for at once. No plant can last forever, and the time will come when some large repairs will have

to be made. If a fund is not provided for this purpose the city will have no money to do the work, and unlike a private corporation, you cannot borrow money when the time comes to use it. In my judgment you should provide a fund by setting aside not less than \$160 a month for this purpose, and we will then be in a position to make repairs when the time comes.



### Chicago Wants to Own Street Railways.

The railway commission of the City Council has declared in favor of a modified form of municipal ownership of street railway properties and in favor of a form of compulsory arbitration in labor disputes which would make street railway strikes impossible.

The commission agreed that street railway strikes are such an interference with public business that the municipality is justified in taking steps to prevent them. While no plan was selected formally the opinion was that all grants of franchises should have a clause providing for compulsory arbitration.

The commission committed itself to municipal ownership, so far as the trackage and other parts of a street railway plant actually in and a part of the street are concerned. It did not decide in favor of municipal ownership of rolling stock, power houses and other parts of the plants and municipal operation did not come up at all.



### Oil For Fuel.

The city of Modesto has decided to try oil as fuel at its central lighting and pumping station. The oil costs delivered at the station \$1.42 per barrel of 42 gallons. The parties selling the oil claimed that in making steam three barrels of oil are equal to one ton of good coal. In other words, where a good quality of coal exceeds \$4.26 per ton, oil is the cheaper fuel. Furthermore, in using oil as fuel, the services

of a fireman can frequently be dispensed with.

The recent oil developments in this state promise an abundance of this kind of fuel.



### The City Shares Corporation Profits.

The Council of Salt Lake City recently passed resolutions providing for the city's having a share of gross earnings of all franchises granted. They follow:

"Resolved, That in granting any franchise of any nature for any purpose whatever, the City Council of Salt Lake shall demand adequate compensation in a continuous income from the gross earnings of any corporation or of private parties asking for a franchise. And be it further

"Resolved, That no franchise be hereafter granted by the city which does not reserve to the municipality the right to become repossessed of such franchise upon the payment to the owners thereof a fair and equitable sum for investment and interest on the actual expenditures involved."



Glasgow, Scotland, has erected a municipal day nursery of 160 rooms, at a cost of \$85,000, for the accommodation of motherless families or for small children whose mothers go out to daily labor and must leave their dependent offspring at home. It is not an orphanage, not a charity at all in the strict sense of the word, since the working people who avail themselves of its privileges pay a small sum for what they receive.



Cleveland, O., proposes to put a big tax on circuses and other amusements. A new ordinance fixes a tax on circuses of \$250 a day. This is the same as in the old license. Theaters are taxed \$75 a year, \$25 more than in the old license.



Hollister and Sausalito have joined the League of California Municipalities making the membership fifty-eight.



## Tar Macadam Pavement.

### *Municipal World.*

Tar macadam roadways are very commonly used in England, but in Canada and indeed the United States as well, they have very rarely been adopted. Hamilton is the only Ontario city, probably the only city on this continent which has made general use of this method of paving, and it appears to be growing in favor there.

It is found to be less pervious to moisture than ordinary macadam, less noisy, less muddy, less dusty. The cost of watering and scavenging is less but it must be regarded as a good substitute merely for ordinary macadam. In Leicester, England, it is called "silent macadam." To sum up its merits as compared with ordinary macadam it is slightly cleaner and more sanitary.

The precise methods of laying tar macadam paving, vary somewhat in different cities, according to local circumstances. The main features require that the street be first excavated, graded, under drained and rolled as for any pavement. On this a layer of broken stone is spread and thoroughly rolled, the thickness being from four to six inches after rolling. On this spread a coating composed of crushed stone and tar, two to four inches thick, the stone and tar having been beaten separately, then thoroughly mixed before being laid. This should be rolled down into a solid mass, after which the road may be surfaced with an inch coating of mixed tar and gravel, rolled smooth. Some pitch is added to the tar; and in English practice, a quantity of creosote is sometimes added as well. It is recommended that this work should be done in spring or fall, although dry weather is essential. If done in summer, the heat of the sun drives the tar out of the pavement.

The pavement is therefore made up as follows:

1. Earth sub-soil, excavated, under-drained and rolled.

2. Ordinary broken stone, four to six inch layer.

3. Mixture of tar and fine gravel, one inch layer.

Care and experience are necessary in laying this pavement, as poor workmanship or defective material will result in a pavement that has a tendency to become soft and yielding in hot weather.

The cost of a piece of finished road in Hamilton, or about 368 square yards, was 76 cents a yard, made up as follows:

Labor, mixing and heating stone.	\$32 64
Removing cedar blocks, grading..	95 37
Rolling.....	7 33
Stone for bottom.....	22 50
Broken stone.....	55 00
Screenings .....	10 00
Gravel .....	3 00
Wood for heater.....	5 00
Tar .....	49 00

\$279 84

This, it will be seen, was for a short section of street which had been block-paved. The cost of grading was, therefore, not so much for a street which had not been previously graded. Nor does this include the cost of curbing. The annual cost of repairs is said to be less for tar macadam than for ordinary macadam.



## A Contract Annulled.

For several years past the Gamewell Fire Alarm Company has been installing fire and police alarm systems in various cities in the state and then permitting the cities to lease the same at a monthly rental with an option of purchasing the same at any time at a set price from which the amounts paid as rent were deducted.

Recently the city of Sacramento made such a contract and agreed to pay \$690 a month for five years as rent for a police and fire alarm system.

A suit was commenced by a taxpayer against the City Council and the

Gamewell people to enjoin the enforcement of the contract.

The matter was heard by Superior Judge, J. W. Hughes and on July 7th the court rendered a decision, holding that the contract was illegal and granting the prayer for an injunction.

The opinion is quite lengthy and the reasons assigned for the annulment of the contract are:

1. The contract was not entered into as required by the charter of the City of Sacramento.

2. The contract was really an agreement to purchase and not a lease, and therefore created a present liability on the part of the city contrary to the provisions of Section 18, of Article II, of the constitution.

3. The contract operated as a restriction upon the legislative power of future boards. The court pointed out some distinguishing features to the case of *McBean vs. Fresno*, which was the chief authority relied upon by the defendants to uphold the validity of the contract.



### The Example of Some Towns.

*Editorial, Sacramento Record-Union.*

Some years ago Stockbridge (Mass.), the home of the famous Field family, was in most unhygienic condition. It was an old colonial town, but its streets were unkempt and filled with mud in spring and fall, dust and debris in summer. Its squares were unkept and the fences of property were rude, lacked uniformity and grace, and were stiff and high. There was lack of neatness, cleanliness and order characteristic of some other towns.

Thereupon Miss Mary Gross Hopkins went to work to form a town improvement society. She succeeded. The story of her work and triumph is too long to recite. Suffice it to say that the women of the place effected a revolution.

The fences came down, lawns cultivated, the streets graded and rubbish disappeared, cleanliness

and good hygienic condition dominated; civic pride was awakened and trees were set out and carefully fostered to maturity; a public library was secured; monuments were erected; decent sidewalk was laid; proper systems for lighting and sprinkling streets were put in; drinking fountains were erected, and so on through a long list of betterments accomplished during a series of years, all due to the beginning made by the improvement society.

Now Stockbridge is one of the handsomest towns in New England and one of the most desirable for residence. Of course all these betterments might have come in time. But just the same the town might have rusted in its neglect for a half century more, had not the improvement society awakened it, quickened its pride and revolutionized its spirit.

It was in 1853 that Miss Hopkins formed her society. Now there are something like 2,000 such institutions in the country outside of great cities, and about 300 inside metropolitan centers, these latter being ward improvement clubs. It is within bounds to say that every town and city in California needs an improvement society, a faithful patient and courageous, but discreetly wise one. Some have them already, but if every town had such a society, in three years California towns would undergo a wonderful change. At present many of them are so unsightly, so ill kept, so uninviting, that it is wise to steer visitors away from them. Even in the very best kept towns and small cities there are still many needs which will not be met by the political government without the stimulus of an improvement society behind it, for these societies are simply means through which the people can speak to the local governors as with the voice. It is the old story of union over again, of agreement and then resolution and accomplishment, because there is common meeting ground for exchange



of views and the making up of the verdict of public opinion.

Petaluma, in Sonoma County, was at one time quite the dirtiest, most repulsive town in California. In the sixties it was certainly a most unattractive place. As it grew to be a small city it did not take on much improvement. In the more remote parts there were betterments, and better residences were erected, but still the town was woefully lacking in many things. In Petaluma a few years ago an improvement society was formed, and as in most cases, good women started the ball rolling. The result has been the transformation of the place into a city of attractiveness; compared with what it was in the sixties, its early state is not to be mentioned, so changed have been the conditions for the better. Neatness has taken the place of untidiness, the parks and squares from being unkempt and mere dirt opens, have been made beauty spots, refreshing to eye and nostril, and the pride of the people. A public library has grown out of the new spirit; the streets have been bettered, graded and kept; electric light and other poles have been painted white and made fairly decent; more hydrants have been put in, and all have been painted red; a street has been opened by reason of the effort of the society, that had been closed twenty years and all after endeavor in that line to open it had been defeated, though the opening was a community necessity.

The people were stimulated into the planting of more ornamental shade trees, private property theretofore neglected has been improved generally, and lawns cultivated. The good women who have held fast to their original purposes in Petaluma have made health contagious, so to speak, and have generally so affected civic pride that Petaluma has now no reason to be ashamed of its appearance, but on the contrary much reason to be proud of it. When the Petaluma Club was formed the 'men folks' patronizingly refrained

from opposing it, believing it best to "humor" the women, and that their enthusiasm would soon die out. They have been so far disappointed that the women have accomplished, with a very little money, such as they could beg and raise by entertainments, and a small grant per month from the city government, five times what it would have been possible to achieve by the same disbursement through political channels.

But after all the chief good of hat club and all of like order is found in the stimulation of pride and good taste among owners of property. Wherever such clubs have formed and adhered to, the result has been the same. Appeal to pride, some use of sarcasm, some little ridicule, the stirring of some indignation, the quickening of taste, the assault of patient reason—all these have won. We cannot learn of a city or town where there is a live improvement association, where weeds grow in the street; where rubbish is thrown or dumped upon the highways; where the residence streets are unswept from one year's end to the other; where the gutters are clogged with debris; where parks are neglected and walk-ways permitted to go to decay; where there is total absence of drinking fountains for man and beast; where cattle are permitted to be herded on unenclosed lots or where untidiness is the rule.

Cold Springs, New York, was one of the dirtiest towns in the United States. An improvement society has converted it into one of the handsomest of places. Thomasville, Ga., was a fair sample of a neglected Southern town. Captain Metcalf's effort in organizing an improvement club has transformed it. What was once repulsive is now beautiful; what was once neglect is now order and neatness. Where bare clay offended the eye, grass well kept adorns the street borders. The bare, dusty town square has become a lover's park, rich in choice shrubbery and select flowers. Ornamental trees have been grown to perfection, and shade is a

chief charm of the streets and opens, once hot, dusty and unsheltered. A "tidy cart" traverses the streets and gathers any scraps falling on the highway; baskets for trash at very frequent intervals catch all the fruit peelings and all the fugitive bits of paper, etc.

In short an old time neglected Southern town has been changed completely, and yet there is more to do, say the reports. Wyoming, O., a suburb of Cincinnati, was made a lovely and most attractive little city by improvement societies, with, of course, as in such cases, a healthful advance in values of property. These are but widely separated examples of achievement.

If California towns and the smaller cities will learn wisdom from such examples as we have cited, they can make the State infinitely more desirable and attractive for that large population which we are constantly soliciting and are so slowly, so very slowly receiving. There is not, by the way, a State in the Union where towns, villages and small cities offer so many natural advantages for comfort, ease or ornamentation and improvement as in California. Every natural condition favors our communities. If they remain unkempt, they must expect to be avoided.



### Excerpts From Mayor Martin's Message.

Mayor C. J. Martin commenced his second term as the chief executive of San Jose on July first. His annual message was a general review of the work of the past year and in addition contained wise suggestions as to future activity.

His report on street cleaning was as follows:

"The sweeping of streets during the past year has been done by hand, the persons doing the sweeping being employed directly by the city. No contract has been let for this work. No machine has been used in accomplishing it. The corp of sweepers has not been extravagantly large, and yet the

sweeping of the streets has been much better done, and the streets themselves have been kept in better condition under this system than under the contract system which formerly prevailed. The other advantage which has accrued to the city has been the employment of men in doing the work, thus distributing what cash the city has to pay for it to people who are entitled to its benefits, and not to contractors perhaps living outside the city.

"A number of public improvements are necessary to the progress and convenience of the city of San Jose which are too expensive to be provided out of its current revenues. The expenses of the city no matter how closely its bills are scrutinized or how closely it is kept within the most rigidly economical limits exhausts each year the revenues which are collected for its maintenance and support under the Charter. Any improvement of magnitude which becomes necessary to the city government must be paid for out of other funds than those collected by the original methods of taxation. The only method left after this is exhausted is the issuance of bonds under the constitutional provisions providing for the holding of bond elections in charter cities of the State of which San Jose is one. This method requires the various proposals for improvement and for the issuance of bonds to provide for and pay therefor to be submitted to the voters of the city at the special election to be held for the purpose and two-thirds of the votes of the persons casting their ballots thereat is required to carry any such proposition.

Among the public improvements now necessary in the city are a free public library building, the improvement of East and West Santa Clara street and South First street with some substantial pavement, provision for the renewal of a considerable portion of the apparatus of the fire department now much worn by long usage, and to these necessary



objects may perhaps be added a provision for erecting a distributing plant for the city lighting and a provision for erecting and maintaining a dam across the Guadalupe creek by which the old lake once existed there may be renewed."



### League Notes.

Hollister, Sausalito and Emeryville, have joined the League of California Municipalities, making a total membership of fifty-nine up to date. This is certainly a splendid showing for less than a year's work.

The special committee appointed at the last convention to frame a new street law has completed the proposed act and copies are now ready for consideration by the entire committee. The work has been done by Messrs. Hutchinson and Finch. Whether it will meet with the approbation of the entire committee remains to be seen. but whether it is or not it will serve as a ground work upon which a satisfactory law can be built and the gentlemen named are entitled to a great deal of praise for their unselfish and painstaking efforts.

Very soon a circular will be sent to all cities requesting them to send in suggestions as to what new laws should be presented to the next legislature. It is desired that every proposed law shall be considered by the League at its annual convention before introduced into the legislature. At every session of the legislature there has been from fifty to one hundred bills relating to municipal corporations. It is desirable that this number be reduced to reasonable proportions and only such measures presented as are really necessary.

The Bureau of Information maintained by the League is proving to be a very useful institution. During the past few months numerous inquiries have been made by various cities and information has been sought on a variety of subjects. Many points of law

have been investigated, copies of specifications for various public works furnished and advice given on many subjects. This department is one whose value will increase with years and will be the means of saving the municipalities from committing mistakes. If cities before undertaking any important improvement will submit their plans to the Bureau of Information possibly some valuable suggestions may be made. The Engineering Committee, the Judiciary Committee and the Executive Committee exist for the purpose of giving advice.



### Recent Court Decisions.

Chas. E. Adams asked the Sausalito board of trustees to grant him a pool room license. This request was refused, the other pool room men apparently having a monopoly of the business. He commenced suit in the Marin county superior court to compel the trustees to issue the license, and Judge Augillotti of the superior court refused to issue the mandate upon the ground, (1) that the ordinance under which the plaintiff sought to obtain a license reserved discretionary power in the Board of Trustees, and (2) the business of pool selling was that of making unlawful contracts contrary to public policy and morality.

Judge Dougherty of the superior court of Sonoma county recently decided that the election held in Santa Rosa last April was illegal owing to the fact that the polls closed at 5 o'clock P. M., while the city charter provides that they should be kept open until 6 o'clock P. M. The city government, however, will move along as before the present officers being *de facto* officials.



A league of Pennsylvania municipalities has been organized, making eleven state associations of municipal officers.

## What the Cities are Doing.

Haywards is codifying its ordinances.

Santa Monica is moving for a new City Hall.

Paso Robles is talking about having a new City Hall.

Bakersfield is preparing to do extensive sewer work.

Vallejo has passed a very stringent anti-gambling ordinance.

A new hose company has been added to Napa's fire department.

Redwood City is to install a complete salt water sprinkling plant.

Redding is talking of a bond issue for sewers and street improvements.

Stockton will consider bids to purchase \$52,000 sewer bonds on September 11.

Anaheim reports that its water works system is in splendid condition.

Marysville contemplates purchasing a combination hose wagon and chemical engine.

San Pedro is proceeding to issue a bond issue amounting to \$40,000 for general improvements.

The Redondo Breeze is urging that important public improvements be made at that place.

Redland's Trustees have appointed a committee to investigate the matter of municipal gas works.

Stockton has an Improvement Club that contemplates doing some effective work in securing municipal improvements.

Auburn is considering the proposition of establishing a sewer farm and the installation of the intermittent filtration system.

The Hanford Trustees have purchased a lot of land which can be used as a site for a water system to be installed at some future time.

Santa Barbara has offered prizes for the best plans for a High School Building. The first prize is \$500; second, \$200; third, \$100. The plans must be submitted by August 7.

Santa Clara has awarded the contract for gas generating works to the California Light and Fuel Co. for \$11,000. The process adopted was the Lowe Improved Oil and Water Gas. No coal is used in this process, which is said to be cheaper than any other.

The cities of the southern part of the state report substantial increases in their assessment rolls, notwithstanding the recent excessive dry years.

Alameda's Board of Freeholders has completed its work; at Pasadena the new charter is nearly completed and at Salinas the work of framing a charter is progressing satisfactorily.

Berkeley has sold its \$100,000 4½ per cent high school bonds to the Oakland Bank of Savings. The premium received was \$6956. This is the highest premium paid for similar bonds for some time.

The construction of nine blocks of asphalt pavement during the last three months is a record which Bakersfield is proud of. More will be put down in the fall. The City Street Improvement Co. has done the work.

Santa Rosa has adopted an ordinance limiting the water consumption to 500 gallons per day for each family or manufacturing institution. That quantity will be furnished free; above that quantity will have to be paid for.

The Yreka News is authority for the statement that reliable parties stand ready to construct a water system for the town in accordance with the adopted specifications and accept as payment the bonds recently voted for that purpose.

Alameda has completed the installation of a salt water pumping plant, consisting of two tanks, two windmills and the necessary pipes. The total cost of both plants was \$2940.20. About 30,000 gallons of water is being pumped daily and the salt water is doing good work. The system will nearly pay for itself this season.

### Personal.

E. P. Huston has been appointed City Trustee of Woodland, in place of L. Chamiack, resigned.

A. Webster has been appointed City Attorney of Paso Robles.

H. L. Partridge has been appointed City Attorney and R. M. Garrett Street Superintendent of San Jose.

D. Bromfield has been appointed engineer to draw plans of Hanford's proposed sewer system.

TRADE NOTE—Yawman & Erbe, (the Office Supply Co.) of San Francisco, have the contract for putting the metal filing cabinets and office furniture for Nevada City's Court House.



## Index--Volumes 1 and 2.

<b>A</b>		Discouraging Expert Officials	
	Vol. Page	Discussion of the Government of Cities	2 141
A Contract Annulled	2 186		
A Continuing City	1 229	<b>E</b>	
Actual Candle Power of Arc Lamps	2 149	Editorial	1 22
Adverse Front Foot Decision	2 127	Editorial	1 54
A Fin de Sicle City	1 19	Editorial	1 82
Alameda's New Charter	2 173	Editorial	1 122
American Municipalities, League of	1 86	Editorial	1 152
American Municipalities, League of	1 43	Editorial	1 201
A Munificent Gift	1 85	Editorial	1 236
Annual Report of the Merchants' Assn.	2 180	Editorial	2 63
Annual Reports, The Value of	2 172	Editorial	2 96
An Agricultural Town	1 21	Electric Light Carbons, New	2 61
A New Idea in Charters	2 94	Electric Lighting Contracts	1 112
A Note of Warning	2 95	Electric Lighting Contracts, Concerning	2 60
Another Adverse Decision	1 48	Encouraging Progress	1 84
Anti-Bill Board Ordinance	2 153	European Street Paving	2 156
A One-Sided Statement	2 110	Experiences of Cities With Municipal	
A Profession of Municipal Management	1 17	Water Works	1 211
A Report on Oiled Roads	2 112	Excerps from Mayor Martin's Message	2 189
A Satisfying Report	1 52	<b>F</b>	
Asphaltum and Cement, Domestic Pro-		Five Departments in Small Cities, Rules	
duction of	1 149	and Regulations for	1 50
Assessments for Sidewalks	1 149	Fire Lighter, an Improved	1 117
Automobile Street Sweepers	1 19	Franchises, Controlling Municipal	2 153
		Franchises, the Tax on	2 94
<b>B</b>		Fuel, Refuse, Use of As	2 54
Barring Sewage Raised Vegetables	1 49	Fuel Test, a	1 47
Bacteria as Destroyers of Masonary	1 112	Fuel, Oil for	2 185
Bakersfield's Public Library	2 121	<b>G</b>	
Bitumen and Bitumenous Pavements	1 41	Getting a City on a Cash Basis	1 67
Bitumenous Cross-walks	1 84	Government of Cities, Discussion	1 147
Book Reviews	1 128	<b>H</b>	
Buffalo's Drastic Dog Ordinance	2 84	Healdsburg's Water and Light System,	
<b>C</b>		Successful Operation of	2 184
California Municipalities, The League of	1 3	Healdsburg Water and Light Works	1 19
Cement Macadam Pavements in Ger-		Honolulu's Proposed Sewer System	1 21
many	2 51	How Municipal Bonds Should be Issued	2 75
Chicago Wants to Own Street Railways	2 185	<b>I</b>	
Cities Owning Water Works	1 89	Improvements, A Special Tax for	2 171
City Charters, Mayor Eaton on	2 157	Improvements at Long Beach	1 42
City Officials Brief Sketches of	1 238	Improved Fire Lighter	1 117
City Ownership in Boston	1 136	In Favor of Water Meters	2 118
City Refuse Destructors as Power Plants	2 85	<b>J</b>	
Closed Arcs and Open Arcs	2 142	Join the League	1 48
Comparative Merits of Steam and Horse		<b>K</b>	
Rollers	2 155	Keep a New Account Book	2 140
Concerning Street Cross-walks	1 53	<b>L</b>	
Controlling Municipal Franchises	2 153	Lamborn's Southern Trip	1 116
<b>D</b>		Laying out of Cities	1 114
Day Labor on Municipal Work	1 81		

League Notes	2	190	Pasadena's Sewer Farm	1	45
League of American Municipalities	1	43	Pavements, Bitumenous	1	41
League of American Municipalities	1	86	Pavement, Tar Macadam	2	186
League of California Municipalities	1	3	Paving (Wood) in the East	1	144
League of Cal. Mun.. Proceedings	1	163	Pecular Municipal Conditions	2	125
League of Wisconsin Municipalities	2	154	Phelan, Mayor Jas. D. Address of	1	163
Libraries, Municipal, in California	2	157	Pneumatic Tube Transit	2	123
Licenses, Municipal	2	44	Power in a Pound of Coal	2	155
List of Cities and City Officials	1	24	Press and the Municipality, the	1	50
List of Cities and City Officials	1	56	Private Profit vs. Public Service	1	134
List of Cities and City Officials	1	89	Proposed New Paving Law in Iowa	0	30
List of Cities and City Officials	1	121	Public Library, Bakersfield	2	121
Long Beach, Improvements at	1	42	Public Ownership and Social Conscience	2	143
Los Angeles, the Water Controversy at	1	99	Public Playground and its Mission, the,	1	39
<b>M</b>			Publicity of Public Service Corporations,	2	174
Mayor Eaton on City Charters	2	157	Public Regulation of the Milk Supply	2	86
Mayor Martin's Message, Excerpts from	2	189	Pumping Without Power	2	65
Milk Supply, Public Regulation of	2	86	Purchase of Supplies. the	1	40
Mistaken Ideas Regarding Sewer Air	1	45	Purification of Sewage	2	179
Model Water Works for Small Towns	1	9	<b>R</b>		
Monrovia's Water Regulations	2	181	Redwood, Salt Water Sprinkling at	1	85
Municipal Accounting	1	35	Recent Court Decisions	2	66
Municipal Bathing Establishments	1	20	Recent Court Decisions	1	118
Mun. Bonds, How Should be Issued	2	75	Recent Court Decisions	1	150
Municipal Employment Bureau	2	149	Recent Court Decisions	2	190
Municipal Gas Works	1	52	Regarding Sewer Ventilation	1	115
Municipal Government, the Study of			Relation of Parks to the Municipality	1	79
the Science of	1	73	Relation of the Business Man to the Mu-		
Municipal Hotel, A	1	19	nicipality	1	15
Municipal Improvement and City Debt	2	119	Reporters as Detectives	2	127
Municipal Indebtedness, Table of	2	160	Right to Charge for Water, The	1	88
Municipal Laws, Work of Code Commis-			Roadways, The Width of	1	45
sion in Relation to	1	70	Rules and Regulations for Fire Depart-		
Municipal Libraries in California	2	157	ments in Small Cities	1	50
Municipal Libraries, Value of	2	52	<b>S</b>		
Municipal Licenses	2	44	Sacramento's Election	1	117
Municipal Management, a Profession of	1	17	Salt Water Sprinkling at Redwood	1	85
Municipal Ownership in Michigan	1	124	San Francisco's Opportunity	2	174
Municipal Ownership Reduces Tax Rates	2	126	San Francisco Election	1	117
Municipal Program, A	1	122	San Rafael's Sewer System	1	81
Municipal Water Works, Experiences of			Santa Clara, Cost of Operating Water		
Cities With	1	211	and Light Works at	2	116
<b>N</b>			Santa Cruz, What a City has Done and		
New Municipal Officers	2	127	is Doing	1	131
New Officers Elected	2	98	Science of Municipal Government, the		
<b>O</b>			Study of the	1	73
Oceanside's Pumping Plant	2	129	Sequoia National Park	1	106
Oakland's Account System, Copying	1	47	Sewage, Purification of	2	170
Oil on Porterville Streets	1	88	Sewage Disposal Problems	1	139
Oil Sprinkling Patent	1	40	Sewage Disposal, Recent Experiments in	1	149
Oil Sprinkling, Some Objections to	1	85	Sewer Air, Mistaken Ideas Regarding	1	45
Oiled Roads, Report on	2	112	Sewer System, A Complete	1	148
Oil Used on Roads	2	110	Sewer Ventilation, Regarding	1	115
Oil for Fuel	2	185	Slot Machine Bonfire	2	124
<b>P</b>			Some Objections to Oil Sprinkling	1	85
Parks, Relation of, to the Municipality	1	79	Song of the Cities, the	1	200



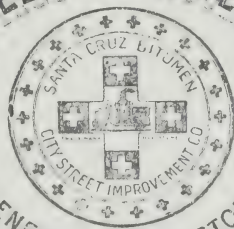
Sprinkling Highways	2	117	Water Controversy at Los Angeles	I	99
Sterilization of Drinking Water	1	149	Water and Light Works, Cost of Operat-		
Street Cross-walks, Concerning	1	53	ing at Santa Clara	2	116
Street Fountains	2	56	Water and Light Works, Healdsburg's	I	19
Street Improvement Acts (Discussion)	1	179	Water Works, Cities Owning	I	89
Street Law, Proposed Amended	2	57	Water Works for Small Towns, Model	I	9
Street Paving, European	2	156	Water Regulations, Monrovia's	2	181
Successful Operations of Healdsburg's			Water Meters, in Favor of	2	118
Light and Water System	2	184	Watsonville's New Sewer System	I	148
<b>T</b>			Weed Ordinances	2	121
Table of Municipal Indebtedness,	2	160	What the Cities are Doing	I	27
Tar Macadam Pavement	2	185	What Cities Are Doing	I	59
Target Practice for Police	2	126	What Cities Are Doing	I	90
Taxation for Public Improvements	2	139	What Cities are Doing	I	120
Taxing Public Bonds	2	107	What Cities are Doing	I	151
Ten Reasons for Membership	2	118	What Cities are Doing	I	202
The City Shares Corporation Profits	2	185	What Cities are Doing	I	241
The Higher Municipality	2	111	What Cities are Doing	2	97
The Example of Some Towns	2	187	What Cities are Doing	2	129
The League Convention	1	116	What Cities are Doing	2	158
The League is Growing	2	154	What Cities are Doing	2	191
The Next League Convention	1	77	What New Legislation is Needed	2	141
The Tax on Franchises	2	94	Width of Roadways, The	I	45
The Town of Nogood	1	58	Wood Paving in the East	I	144
The Value of Municipal Libraries	2	52	Work of the Code Commission in Rela-		
The Relation Between the Geology of the			tion to Municipal Laws	I	70
Sources of Water Supply & Disease	2	175			
Tournament Hose Rules	2	124			
<b>U</b>					
Uniform Municipal Reports	2	109			
Use of Refuse as Fuel	2	54			
<b>V</b>					
Vallejo Water Rates	2	65			
Value of Improvement Clubs	2	109			
<b>W</b>					
What a City Has Done and is Doing					
(Santa Cruz)	I	131			
Washington's Shade Trees	I	43			

**Rackliffe & Reese,****General Municipal Contractors,****Ferndale, Cal.**Bids on Sewers, Waterworks, Electric Light  
Plants.**DR. E. STELTZNER,**German Sanitary Expert Medical Jurisprudence.  
Analytical.**332 Geary St., near Powell,  
San Francisco, Cal.**

H. DUTARD  
C. B. STONE  
Directors: T. B. BISHOP  
J. W. McDONALD  
W. E. DENNISON

J. W. McDONALD,  
PRESIDENT  
W. E. DENNISON,  
SECRETARY

BITUMEN MINES  
SANTA CRUZ,  
MONTEREY AND  
SAN LUIS OBISPO  
COUNTIES



CONSTRUCTORS  
STREETS, BRIDGES,  
RAILWAYS, RESERVOIRS,  
WHARVES, JETTIES,  
AND SEA WALLS

MILLS BUILDING  
FIFTH FLOOR, ROOMS 10-11 12 & 45

TELEPHONE MAIN 5377.

San Francisco, CAL.

Preserve all  
copies of this  
Magazine.  
They may  
be valuable  
sometime.

# CALIFORNIA MUNICIPALITIES

Vol. 3.

San Francisco, August, 1900.

No. 1.



SCENE IN WESTLAKE PARK, LOS ANGELES.

SAN FRANCISCO OFFICE,

Room 14, 8th Floor, Mills Building.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.



LATEST, GREATEST, BEST

# WORK OF TRAVEL

EVER PUBLISHED.

## JOHN L. STODDARD'S LIFE WORK

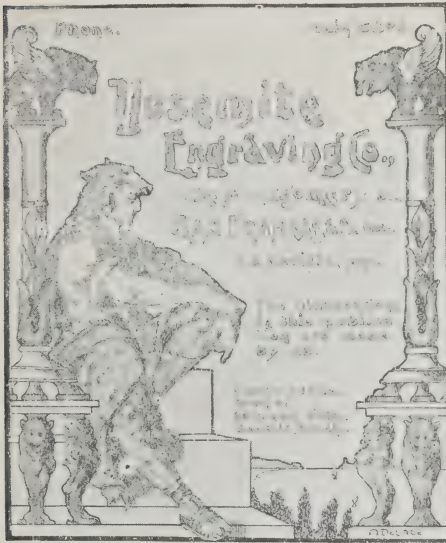
In Enduring Form. A Complete Edition of the Identical Travel Lectures delivered by Mr. Stoddard during the past 18 years.

TEN SUPERB CROWN OCTAVO VOLUMES.

The Complete Library of Travel, embracing every place in every land that allures the traveler.

**THE WHITAKER & RAY CO., 723 Market St., San Francisco.**

Write for free specimen pages.



### Use Yates' Paint

On all Public Work.

### It is DURABLE.

Manufactured in  
San Francisco, at 117-119 Market Street.

**FABRIC FIRE HOSE CO.**  
68 MURRAY ST. NEW YORK.  
W. T. COLE, GEN. MANAGER.

**PATENTEES AND SOLE MANUFACTURERS OF  
WAX AND GUM TREATED  
FIRE HOSE**

San Francisco Headquarters at 509-511 Market St.

New York Belting & Packing Co., Ltd.

# P & B

## Building Papers

## Ready Roofings

ALL DEALERS

MANUFACTURED ONLY BY

## Paraffine Paint Co..

## San Francisco

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 3.

San Francisco, Cal., August, 1900.

No. 1.

## California Municipalities.

Published Monthly.

H. A. MASON, Editor.

Office of Publication, Room 14, Eighth Floor, Mills Building, San Francisco, Cal.

### CONTENTS.

#### COMMENT:

In Relation to Ourselves, 3—The Suburban City, 4—Two Many Independent Commissions, 5—City and County Licenses, 5—Another Proper Report, 6.	6
Berkeley's Progress.....	7
Is a Third Party Necessary in Municipal Reform .....	10
Riverside Power Plant.....	10
Oil for Fuel.....	11
Oakland's Improvement Organizations and Their Works— <i>W. B. Reynolds</i>	13
Concrete Sewer Pipe .....	13
A Town Forest.....	14
Town May Order Shade Trees Removed...	15
Growth of Cities.....	16
Porch Lighting.....	17
Shows vs. Permanent Improvement.....	17

#### LIBRARY DEPARTMENT:

First Words, 18—Oakland Library Building, 19—Golden Gate Park Branch, 20—Alms House Library, 20—A California Traveling Company, 20—The General Library Law, 20—Children's Rooms, 22—American Library Association, 22—Summer Schools, 22—Coast notes, 23—Pasadena Public Library, 24.	25
Garbage Disposal in China.....	25
Boston's Automobile Engine.....	26
A Big Institution.....	27
National Municipal League.....	28
What the Cities Are Doing.....	28
Personal.....	29
Subways in Cities.....	29
Municipal Baths in New York.....	29
Salt Water Sprinkling.....	29
A Good Showing.....	31

## COMMENT.

**In** CALIFORNIA MUNICIPALITIES has now been published for one year. During this time the main purpose of the magazine has been to interest public officials. We trust that the effort in this direction has been appreciated.

While not abating from the original purpose, at the same time it is greatly desired that the scope of the publication should be gradually broadened with an endeavor to secure the attention of citizens generally, especially those already interested in municipal government. We believe that it can be made useful to members of improvement clubs, municipal leagues and merchants associations and other civic organizations that devote considerable attention to municipal affairs.

We ask the co-operation of city officials in the work of extending the circulation of this magazine among such organizations and among their friends who are liable to appreciate the importance of spreading a knowledge of the science of municipal government.

In pursuance of the idea of broadening the work we give some space this



month to the work of improvement clubs and have also added a department of Public Libraries. It is the intention to publish library matters once every two months. The magazine this month has also been enlarged four pages. We hope the enlarging process will occur frequently.



**The Suburban City.** While the official results of the recent census have not yet been proclaimed, yet in an inkling as to what will be shown concerning the population of the larger cities seems to prevail, and in most instances there are murmurs of disappointments that such cities have not made the gains of population expected and hoped for. During several decades prior to 1890 the census showed a phenomenal growth of large cities and it was anticipated that the same tendency would be manifested, would reveal itself during the past ten years.

When we come to consider the subject, it is not difficult to see that there has been a marked tendency on the part of urban residents to seek suburban homes, and the tendency for the rural districts to go to the cities is in a fair way to be balanced by city people establishing themselves in the smaller towns and villages near to a metropolis. It is more than probable that the more startling growths of population will be found to be in the suburban towns.

This growth has its causes; mainly, the discomforts of living in a large city. The big city is a crowded place with smoky and impure atmosphere; its streets are dusty and frequently ill paved; its moral atmosphere is unwholesome; living is expensive, especially in the matter of rents; its schools are overcrowded and generally not the best—in fact, a score of discomforts and disagreeable features may be charged against the modern metropolis.

On the other hand, the small suburban town can offer attractions for home-builders. The smaller town has a pure atmosphere; there evil temptations are not prevalent to the extent that beset the youth of the big city; its municipal government is better; politics do not control the schools; there is more physical freedom, and those who have families to raise give these matters grave consideration.

Of course, we must not overlook the part that rapid transit is playing in the transformation of urban and suburban life. Rapid transit is the real cause for the failure of the metropolis to make large gains in population.

Without knowing the exact census returns we may expect that the suburban towns of California will show the largest percentage of increase of population. We venture the assertion that the coming decade will show still greater percentages of increase in these towns. San Francisco's suburban towns ought to grow.

The vicinity of the city abounds in beautiful towns. On the bay shores among the hills and in the valleys contiguous to San Francisco are sites for a score of ideal suburban towns. Some of these, like Oakland, Alameda and Berkeley, have already established themselves as such cities. Other cities are aspiring in the same direction and are making bids for the suburban-ite. South of San Francisco there is San Mateo, Redwood, Palo Alto, Santa Clara, San Jose and Los Gatos, all within easy reach of the commercial center of the state. Northward Sausalito, San Rafael, Belvedere, Petaluma and Santa Rosa are within the radius of metropolitan influence. Martinez, with proper effort, might become a suburban town, while San Leandro, Haywards, Emeryville can properly be classed now as the home of the city business man.

The municipal authorities of these towns can do much towards stimulating suburban growth. The towns should be made beautiful. There should be nice, clean streets, parks and playgrounds, the best of schools, public libraries, an abundance of pure water, electric light and gas plants and all things necessary for the comfort of the citizens. Sanitary measures should be considered. The sewer systems should be complete; there should be a proper food inspection and the health of the inhabitants should be of the highest consequence. The city that can furnish all these things will attract the greatest number of suburban residents.



**Too Many Independent Commissions** One of the predominant features of California Freeholders' Charters, is that which provides for a number of independent bodies each vested with power over a certain department of municipal service and operating independently of each other and without any relationship to any central body. We have in many cities a Police and Fire Commission, a Board of Public Works, a Board of Health, a Board of Library Trustees, a Board of Education, each supreme within its jurisdiction with power to contract debts and expend the municipal revenue. The Council is also an independent body, but has little or no control over the other boards, yet it is called upon to provide the revenue with which to operate them. There is a lack of harmony between these different commissions and it is fast becoming apparent that effective work is not being done for the whole municipality. We have noticed that in many cities the Council complains of the Board of Public Works and vice versa; the Library Trustees complain that the Council does not furnish funds to make their

department effective; the Board of Education laments the fact that school facilities are inadequate because forsooth, the street department or police commission spends too much money.

It ought to be evident to even the casual student of municipal affairs that the multi-board plan of municipal administration is a failure. But what shall be substituted for it?

Why would it not be the proper thing to abolish the Council and then vest all the legislative powers of the city in the various commissions consolidated for that purpose? In other words, let the Board of Public Works, the Board of Police and Fire Commissions, Library Trustees, and Board of Education, collectively legislate for the city and provide revenues. In this way each commission would be brought into relationship with all the others and no particular department would be apt to spend more than its proper share of the city's revenue.

Of course, the same result could be accomplished by abolishing all of these boards, and by electing a large council, provide for the creation of separate boards or committees out of its membership. Perhaps this would be the better plan. This is really the English system of municipal government—a large representative body doing the work through committees having powers similar to those vested in our independent boards and commissions.

We would like to see this system adopted by some progressive California city.

Will Los Angeles or Oakland or Pasadena adopt a new charter along these lines?



**City and County Licenses** Many of the cities of the State have complained of the practice indulged in by County Boards of Supervisors of im-



posing license taxes upon the saloons and business houses located within municipalities. In addition to the county license, the city usually imposes a city license and the tax is usually severely felt by those who have to pay it. It is double taxation with vengeance.

City officials complain that the imposition of license taxes by counties deprives the city of much revenue without any special benefits resulting to those who pay the tax.

This matter is now under investigation by the League with a view of first determining the extent and localities where the injustice prevails and then seeking some method of correcting the evil. The matter will be given serious consideration.



**Another Proper Report.** The annual report of Art Newberg, City Clerk of Petaluma, has reached this office and he is therefore entitled to go on the roll of honor. This roll is exclusively for those clerks and auditors that issue annual reports that are intelligible and show precisely from what sources the municipal revenues were derived, the amount received from each source, and for what purpose the same was expended, segregating the expenditures into as many items as possible. To get on the roll the report must be printed and sent to this office. This has been done at Petaluma in a fairly good manner the only improvement to be suggested would be another table dividing the receipts and expenditures into two classes—"ordinary" and "extra ordinary."

Since the above was written, Santa Barbara is to be added to the roll of honor, with the very complete report of City Clerk, Alfred Davis. It affords such information concerning the receipts and expenditures of the city as the tax-payers are entitled to know it and ought to be appreciated by them.

### Berkeley's Progress.

It is claimed that Berkeley is expending a quarter million dollars on street improvements this year. Also, as is well known, a hundred thousand dollars have been voted and is now in hand for new school buildings.

Besides this the Southern Pacific Company is extending its electric system, regardless of cost, to West Berkeley and to North Berkeley, thus making our car facilities the best of any town of its size in the world.

We have a "Good Government Club," a "Hillside Club" in Scenic Park, "Improvement Clubs" in West Berkeley and in North Berkeley and are likely to have them soon in East Berkeley, Ashby and Lorin.

During the past year, by popular vote and town ordinance, saloons have been prohibited within the town limits.

For many years there has been a "State Mile Limit Law," which has been fairly enforced and had a very salutary effect. But, as Palo Alto and other college towns generally excluded the saloons entirely, it was evident that Berkeley must do the same or fall into the rear of the procession.

Now, in every important respect, Berkeley is rapidly improving and taking her place in the front rank of university towns. This is as it should be.

The State has conferred a great favor on our town by locating the University in our midst. In return we owe it to the State to make the town a worthy of the institution a possible.

We should not only improve our streets, parks, public buildings, car lines, etc., but above all should make the town a safe place for the thousands of young people who come here for education.

We should do all possible to make Berkeley the most beautiful and in every way the most desirable place on earth in which to live.—O. G. MAY, in *Berkeley Gazette*.

## IS A THIRD PARTY NECESSARY IN MUNICIPAL REFORM WORK?

BY JOHN JAY CHAPMAN IN "MUNICIPAL AFFAIRS."

THE impulse that makes us wish to form a third party is a sincere one. It comes from a desire to do something useful and consecutive in politics; and our first thought is to imitate the political parties. Everyone concedes that citizens' movements are useful. Why then should we not have a continuous citizens' movement, organized in such a way as to be a permanent force in politics? We know that in order to improve our public life we must have continuity of effort. Ought we not to have continuity of formal organization?

Perhaps no man could have been wise enough to see in advance the fallacy in this reasoning, which seems so plausible; but our experience has showed us that the organization of a permanent third party is both impossible and undesirable. The reason at the bottom of this impossibility is that our true aim is a purely moral aim; we desire to benefit the community by raising the standards of political conduct. It is idle to pretend that we ought to have some more definite aim than this, that we ought to adopt some cause like Municipal Gas or Small Parks; some program that men could understand and subscribe to, some positive basis, some demand for a specific thing. As a matter of fact we are not set in motion by a desire for a specific thing. If we pretend that we want any specific thing we deceive ourselves. And we shall be undeceived, very likely, in the outcome; for we shall receive what we ask for at the price of some moral turpitude—and we shall be disgusted.

Let a man once discover, by reflection or by bitter experience, that the nature of his interest in reform politics is, at bottom, a moral—not to say a religious—impulse to do good to his fellow men, and two things will come

clear to him. *First*, that the running of independent candidates is a valuable form of political activity, and should be kept up continuously until the regular parties themselves nominate men whose moral standards are as high as those of the independents. And *second*, that this putting up of independent candidates must be done each time by a group of individuals who are not themselves organized into a party, or into a club, or into anything which can be bought, threatened or controlled.

In other words, the reformers have got to live at the top notch of an initial enthusiasm. They are always at the beginning uncommitted to particular schemes, men or hierarchies. They are always engaged in putting off the first expensive effort that shall help them find their true friends. They can safely rely upon nothing but their cause and their activity. They must take up each campaign afresh, with no added help from the past, except the confidence which their honesty may have earned, and the experience their labor has given them.

The outlook upon endless and thankless hard work discourages many men. The persistency of those that keep at it is a mystery to those of the world, and indeed the workers get a sort of admiration for stubborn grit; for the world thinks that the men themselves must know that their labor is worthless, and that they continue to do it out of desperation and habit. But the truth is that the utility of conscientious work is revealed to the men who do it. They see accomplishment where every one else sees only failure. And the harder they work the more sharp-sighted they become as to the usefulness of just such work as their own. A man at twenty-five will hardly be content with anything less than sweeping changes in society. He believes that he can do



great things in a short time. As time goes on he becomes undeceived as to the speedy nature of reform; but the very experience which teaches him that sweeping and sudden reforms are not to be expected, reveals to him the reality of those slow and not always visible changes for the better which patience and continuous effort bring in. Thus the mainspring of motive in him remains as strong as ever.

I have thrown together the following suggestions as to why party organization is a danger in the conduct of moral reforms; and especially in the conduct of our own cause which is simply moral agitation in its purest form.

#### A PARTY ORGANIZATION UNNECESSARY.

What is it that we expect to do with our party after it is formed? Surely everyone knows. We intend to run candidates for office, promote legislation, hold meetings, distribute literature, affect public opinion, stimulate public spirit. There is no one of these things which really requires party machinery. Indeed, all our reforms have hitherto been done without party machinery, and yet the idea floats in our minds, that sooner or later we must form a party. We are used to seeing all political influence housed in party organizations and have not had time to discover that effectual influence, practical power for good can come from men who have no party organization, nay from men whose public power is due to their hostility to their own party organization.

#### INFLUENCE OF INDEPENDENT VOTERS UPON PARTIES.

A reformer who excites a desire for virtue in other men's breasts must be encouraged if these other men accept virtue wherever they can find it. They ask it first from their own leaders. If they are Republicans they demand a candidate of a higher stamp than their old candidates. They become restive under an old leader. A

faction develops inside the party which protests against a Quigg or a Hess, and after a few efforts, succeeds in replacing him with a slightly higher class of man. They thus begin to purify their own party, they begin to abolish part of the iniquity that now offends them, and in this way the influence of the reformer creeps at second hand into the party organizations, not destroying them, not even threatening their existence, but changing their character. Meanwhile the men whose activity started this ferment within the party themselves stand altogether outside of the party organization, and continue to stimulate the entire public, including the organization men, to a higher sense of public duty. These stimulators and originators of new public standards are always the most important factor in the life of a nation. They do more good than any other single factor in politics.

The charge is brought against reformers and reform candidates that they seem to think all the virtue of society is lodged in themselves. This charge is justified the instant the reformers set up an organization and ask anyone to support that organization. It is not justified if they merely put a set of candidates in the field and appeal to the public on the private character and record of these candidates. "Do not trust us," they say; "look at these candidates, and if you will not vote for them, go force your parties to put up others of as good a character."

So long as reformers in taking action upon any public matter merely call upon the citizen to support their cause on the merits, and solely upon the merits, of the matter in hand, they cannot be charged with pretending to be holy. So long as reformers ask nothing whatever for themselves, they cannot be thought selfish. "Well," it is objected, "but the mere running for office is a sign of selfishness." Not in a man who has no organization behind him. This is not thought selfish. It is thought

foolish by people who do not understand the reason for it; but it is never thought selfish even by the most cynical.

#### PARTIES DO NOT INSPIRE CONFIDENCE.

Thus we are obliged to confess that, even if mere considerations of practical expediency were to govern us, they would be enough to make reformers abandon formal organization. In one word, you cannot get public confidence till you abandon formal organization. But there are greater reasons than this. The end which the reformer has in mind is not to govern people but to teach them to govern themselves; not to make men intrust their affairs to his guidance but to make men intrust their affairs to the guidance of honest agents. The reformer's success consists in the improvements brought into public life by his activity. It is victory enough for him if he gets good government at all, or if he gets ever so slight a change for the better.

#### PARTIES PRODUCE BOSSES.

There is still another and even more fundamental reason why reformers should not seek to form a party or a paper organization of any sort. The regular parties, while pretending to be representative in character, are in reality always run by a few men. The concerted action of large bodies of men is obtained by a manipulation of party machinery. In other words, the party system which reformers are asked to imitate is a fraudulent affair, which seems to record the will of the majority but really only executes the will of a few leaders. Now whatever may be said as to the theory of representative government, and whatever argument be made showing that a proper organization ought not to be a creature of its leaders, it is one of the facts of history that all organizations have been creatures of their leaders and that they have been kept in existence because they were necessary as a means of promul-

gating the will of a clique. The leader of a reform movement would, if he were to form an organization, be obliged to use his organization in the same way. He must go through the pretense of obeying, while he is really commanding. This bit of hypocrisy is inherent in the party idea, and the resort to it always destroys the moral influence of reformers who adopt the party idea.

#### SPOILS—THE OBJECT OF PARTIES

Political parties measure their success by the number of offices they capture, and so we are told that reformers have no power unless they capture offices. This is like trying to measure how much good a man does by how much money he earns. It is absurd. Of course you cannot measure the influence for good done by a reform campaign, any more than you can measure the influence of six months of boarding school on your eldest boy. You can hardly ever measure the influence of any good thing. You cannot measure the good influence of St. Luke's Hospital. And no reformer ought to expect Providence to present him with a half yearly balance sheet for him to show to his friends. But there is a very consoling feature about reform work if taken up in the right spirit. It makes not much difference what you lay your hands to, or whether it would generally receive the name of politics, or charity, or education; so long as it tends to make men public spirited and tender-hearted, it is valuable. You can trace any effective charitable or educational work right home to its political effect, or any bit of politics right home to its educational effect. This is the reason why all of us, without knowing exactly why we do so, concede the first place of honor to those workers who live among the poor. These men, within their limits, accomplish all reforms at once. The rest of us have to justify ourselves and our work by showing that in the end it operates as theirs does in making men honest, self-respecting and high-minded.



The workers among the poor show the maximum of self-sacrifice, and therefore we approve of them; they show also the maximum of what is visible in results, can see their kindergartens and their libraries, and therefore we approve of them. The political reformer sacrifices, at the best a few hours or months of his time. He does not present a very heroic spectacle. The severest class of political reformers among us do no more than might be expected of any right-minded man in a democracy. The results which these men accomplish are a change in the political atmosphere. Such results are too indefinite to be noticed; and unless a man has had a hand in a reform movement himself, he is apt to believe that such changes for the better are phenomena of nature, and occur by themselves, without anyone's effort, and in spite of all apathy.

Hence it is that agitation for morality in politics is not a popular occupation. And yet nothing else will do the peculiar educational work which this kind of activity accomplishes. It is both a harder job and a greater service to mankind to make a banker vote against his party than to make him give \$1,000 to a hospital. For not only is the vote very apt to cost him \$50,000 in loss of business, but the vote causes him to think; while the gift of \$1,000 allows him to dine and sleep in peace, and is apt to be a good investment at that.

The average American citizen has an idea that if only the reformers would take the proper course they could no doubt accomplish much. He will agree to anything which does not call on him for work. He is glad when you tell him that a third party is not desired, but is outraged if he hears that anything can be done except through a party. He revels in any line of reasoning, whether optimistic or pessimistic, which leaves him free of the business; and avoids any reasoning which leads up to his taking a hand in reform. When all is said on the matter, this remains the practical question in America, to get the average man to see that reform is his business.

## Riverside's Power Plant.

*Riverside Press, Aug. 7.*

The Board of Trustees, after an all-day session yesterday, ended their long investigation into the merits of the various bids presented for furnishing a steam power plant by accepting the bid of the Tracy Engineering Company of San Francisco.

The generators had been decided upon some time ago, and are to cost \$8,511. The cost of the engines and boilers will be \$26,270, making the total cost of the machinery \$34,781. This will leave a good balance with which to build the necessary buildings, construct the oil tanks, etc. The fuel to be used will be oil.

The Tracy Engineering Company will furnish three Sterling boilers of 150 horsepower each, and two Nordberg engines of 200 horsepower each. The Trustees are satisfied that they have secured the best plant in the market, and the people are to be congratulated on having a Board of Trustees that is willing to spend weeks of hard work investigating for the benefit of the community.



## Oil For Fuel.

*Modesto News.*

Preparations are being made at the city water works to substitute crude oil for fuel instead of wood and coal. Two storage tanks of 7,000 gallons capacity each are being made by A. R. Jamison, and two feed tanks of 100 gallons each will also be constructed. The two large tanks will be placed under ground to avoid all liability to explosion and will be set a sufficient distance from the water works building to insure safety. The storage tanks will supply the feed tanks and the engines will be supplied automatically. The saving is estimated from one-third to one-half in the use of oil over fuel and the labor is greatly lessened. The dense smoke which at times is annoying to residents near the water works will also be eradicated. The change will be made as soon as the preparations are completed.

## OAKLAND'S IMPROVEMENT ORGANIZATIONS AND THEIR WORKS.

IT is only in recent months that Oakland's various improvement organizations have counted for very much in shaping the course of municipal events. At the present time, however, owing to the introduction of the idea of a central organization composed of delegates from the various clubs, these organizations have come to be regarded as remarkably effective agencies in arousing public sentiment as to the urgent need of bonding the city for public improvements. For those who care to study the influences of public sentiment in creating municipal ideals into reality along practical lines, a history of the local improvement club movement as it may be called for want of a better name, will perhaps offer a few suggestions of value to the public-spirited element of other cities.

Until July of last year there were but three or four district improvement clubs in Oakland each struggling with varying success with problems affecting its particular locality. Except in one or two instances these clubs attempted nothing requiring much of a campaign since, being limited in influence, they could hope to do nothing that required efforts depending for success upon general rather than local agitation.

On the date mentioned, however, in response to a suggestion made by one of the city officials, delegates from five or six district clubs met and organized a central club known as the Associated Improvement Association, being strictly non-political in character, and having as its objects, as stated in the constitution: "The securing for the citizens of Oakland, a larger and more beautiful city, with improved streets, sewers, and parks, with increased business activity and facilities, and with greater commercial possibilities."

As meetings were held from time to

time the deliberations of this central body attracted the attention of residents of those sections of the city where clubs had not been organized.

Realizing that the central club would have a determining voice in the matter of selecting the projects to be decided for in a bond issue, and not wishing their districts to be neglected, the residents of these unrepresented localities gradually formed clubs of their own and sent delegates to the central organization instructing them to work for certain betterments. In consequence ten clubs now have delegates entitled to membership in the big organization, and every district in the city, from the water-front to the Berkeley and Piedmont hills has its particular claims advocated by a strong partisan.

Digressing a moment before relating the extent of the work accomplished by this club reference should be made to another kindred movement. Early this year a number of the more influential business and professional men of the community decided to supplement the efforts of the Central Improvement Club in its labor of preparing a definite statement of what public betterments were desired through the proposed bond issue. As an outgrowth of this idea the citizens' Bond Improvement Committee was organized having as its membership one hundred of the most representative men from every section of the city. Fast work was made of the matter of appointing committees and delegating to each a particular subject upon which it was to report. There were seven of these committees charged respectively with the duty of investigating the questions of sewers, water supply, schools, city hall, fire department, streets, and wharves and water front.

Each of these individual committees



made an exhaustive examination of its particular subject, formulated a report giving all the facts obtainable, and made suggestions as to the amount of money that should be expended. These reports were then taken in hand by the executive committee which consulted with civil engineers for scientific guidance. Finally, the executive committee made its recommendations to the larger body and the organization as a whole promulgates a report which was sent to the City Council as a definite expression of the will of the people.

Both central organizations worked at the same time, one acting as a sort of check upon the other. Some very radical differences of opinion were developed between the two bodies because of a desire on the part of the latter organization to exclude from consideration in the bond issue the important matter of improving the western water front by the building of a system of wharves for ocean-going vessels. The older club finally triumphed, and as a result the report which went from the Bond Committee to the City Council represented the conclusions of both improvement organizations.

Believing it wise to act only upon the most reliable information, the Council is now taking the opinion of an expert engineer as to the details of expenditure on these various matters of public improvement. When these reports have been rendered and considered, the Council will undoubtedly call the bond election.

A point in conclusion. The value of the labors of the two central organizations lies not so much in the fact that they have succeeded in presenting a definite statement to the Council, but rather in the fact that all of the district organizations and the leading citizens as represented in the later bond committee are in accord on the desirability of the several projects. As soon as the bond election is called these district organizations will enter

upon a concerted campaign all over the city, and as bond campaigns are largely matters of education it is patent to anyone that the whole community is organized so thoroughly that the bond election, when called, can scarcely fail to carry. This is all the plainer when it is considered that each district, in some measure, is represented by one or more of the projects to be voted upon. In view of this the situation, as a voting proposition, resolves itself down to a question of one district supporting the next in the hope of receiving support in return.

Appended will be found a list of the officers and delegates to the Central Improvement Club, and also the officers of the Bond Committee of One Hundred.

Associated Improvement Club:

President—C. A. Chichester, Golden Gate.

Vice-President—J. C. Bullock, West Oakland.

Treasurer—J. S. Wixson, North Oakland.

Secretary—James S. Naismith, Linda Vista.

The Associated Improvement Club is composed of five delegates from each of the ten active improvement clubs in the City of Oakland. The following are the delegates now holding credentials:

Adeline Improvement Club—B. B. Haskell, J. A. Thompson, J. A. MacGregor, L. Zaunich, J. G. Hill.

Boulevard and Peralta Heights Improvement Association—B. H. Welch, Chas. D. Hayes, T. A. Downing, I. I. Boak, W. P. Todd.

Golden Gate Improvement Club—N. Rouke, H. T. Burns, C. A. Chichester, S. Dewing, L. A. Teague.

Linda Vista Improvement Club—A. F. Coffin, R. M. Lyman, J. S. Naismith, R. M. Price, E. M. Walsh.

North Oakland Improvement Club—P. Brophy, Charles Des Cormeirs, N. J. Herby, J. S. Wixson, A. A. Denison.

Telegraph Avenue & Northern Oak-

land Improvement Association—M. S. Deming, J. G. Lemmon, R. J. Montgomery, H. H. Ingalls, W. C. Wallace.

Twenty-third Avenue District Improvement Association—C. W. Emery, F. W. Fernhoff, Dr. N. K. Foster, Samuel Swift, L. W. Forsting.

West Oakland Improvement Club—F. Koenig, Wm. Christian, W. W. Morrison, J. C. Bullock, H. W. Watkins, Giles H. Gray.

Italian-American Improvement Club—Jos. B. Reboli, F. Galmarino, O. Izith.

East Oakland Improvement Club—H. M. Cameron, L. J. Hardy, Jr., A. Fonte, J. A. Webster, Chas. J. Welch.

Citizens' Bond Committee—President, Warren Olney Sr.; First Vice-President, John A. Britton; Second Vice-President, J. S. Wixson; Third Vice-President, A. Schilling; Secretary, Harry F. Gordon; Treasurer, D. Edward Collins.—J. H. REYNOLDS.



### Concrete Sewer Pipe.

At Riverside some sewers are being constructed of concrete and a machine for making and laying the pipe is thus described by the *Riverside Press*:

"The machine is operated by one man, assisted, of course, by the necessary laborers to supply the required material. The trenches for receiving the pipe, having been dug to the required line and grade, the machine is placed therein, and connected by hydraulic hose to a powerful pump on a large traction engine, which continuously moves forward as the work progresses. The material is prepared upon the bank, by thoroughly mixing the best brands of Portland cement with clean, sharp gravel, just enough water being added to cause the concrete to pack readily under the pressure of the machine and secure the very best condition for the setting of the cement. This material is then fed into a hopper upon the machine. From thence it is

forced between the core and outer shell by the heavy hydraulic cylinder, resulting in a continuous pipe—the diameter, of course, being gauged by the size of the machine employed.

The operation reminds one very forcibly of the old-time sausage stuffer, except that instead of sausage being forced out of the machine, the machine is forced forward and away from the pipe, thus leaving in its wake a fully completed pipe, without joint or seam of any kind, and absolutely perfect as to grade and line, as the operation is such that should any slight inequalities be left in digging the trench, the machine tamps them full of concrete, thus insuring against settling or deflection from the true grade. The carrying capacity of pipes constructed by this new method is at least twenty per cent more than of the ordinary joint pipe commonly in use of corresponding diameter, on account of its smooth and uniform surface, which it is absolutely impossible to secure by the old method.

Another great advantage which it possesses over jointed pipe is the impossibility of its invasion by tree roots. Roots seek out the slightest imperfection in a joint, through which they creep and finally destroy the usefulness of the pipe by filling it with a mass of fiber, and thus destroying its carrying capacity. The continuous pipe, having no joints, is entirely free from this objection."



### A Town Forest.

Brunswick, Maine, a town of about 7,000 inhabitants, is thought to be the first municipality in the United States to undertake forest planting on a large scale, on what is practically the old world institution of a town forest. The town owns a tract of about 1,000 acres and at a recent meeting of the council \$100 was appropriated to improve this land by planting it in white pine. Town forests are common in Europe, and often furnish a large part of the municipal revenue.—*Municipal World*.



### Town May Order Shade Trees Removed.

The City of Santa Ana not long ago passed an ordinance requiring property owners to remove certain trees along the streets, the roots of which entered and interfered with the operation of the sewers.

A property-owner was arrested and convicted in the Recorder's Court for the refusal to comply with the ordinance. The case was appealed to the Superior Court, and Judge Ballard sustained the ordinance. The gist of his opinion is as follows;

"We will assume here that the city in pursuance of its legal power has established a sewer on and along Main street, and that this ordinance requiring the removal of pepper trees on streets where such sewer is laid, as indicated by the title of the ordinance, is for its preservation. That the city has the power to protect such property from injury, there can be no question, and may by ordinance or resolution provide such means of protection. Since the right to establish, construct and maintain sewers, is one of the express charter powers of the city, it must necessarily have the incidental power to preserve and protect the same from injury and destruction. The city by its charter provisions has control of the public streets. It may lay out, alter and abandon the same; determine the width of street and walk; provide for the planting of trees therein; improvement thereof, such as grading, paving, macadamizing, and the power to remove encroachments and obstructions, and it may be stated, as a general rule, that the city has its general or incidental authority to suppress and regulate all or any of those things which are hurtful to the general good, subject, of course, to constitutional limitations.

The public health is of the utmost importance in municipalities, as elsewhere, and has at all times engaged the attention of national, state and municip-

pal legislation. And so, in this city, in the interest of the public health of its citizens, and to secure and promote the same with legal sanction. It has constructed in its public streets, over which it has entire control, a public sewer system, with the express power not only to establish and construct, but to maintain (which latter term simply means to keep, hold, support, preserve in a particular condition) the same, and the incidental authority 'to exact and enforce within the limits of such city all local, police, sanitary, and other regulations as do not conflict with general laws.'

"In the case of *Village of Carthage vs. Frederick*, 122 N. Y. 268, 19 Am. St. Rep. 490, decided in 1890, the Supreme Court of New York held valid an ordinance making it the duty of any owner, occupant, tenant or person having the charge or control of any premises to remove snow and ice on the sidewalks and imposing a fine for refusal or neglect. The public acquires a mere easement generally, or a right of passage of a highway, the freehold still remaining in him from whom the freehold was acquired. And he may make use of a portion of the walk for the purpose of growing trees, in accordance with both State and municipal encouragement, and subject to such limitations as may be provided. And the owner of the land abutting the highway retains his exclusive right in trees growing along the walks for all purposes not incompatible with the rights of the municipality and the general public. And he may protect his interest therein as against any but the public or municipality which may cause their removal whenever they are hurtful to the public good.

"It seems, therefore, because of the special interest the adjacent landowner retains in such trees, which may generally be considered of some intrinsic value when cut and removed; that the city has the power to cause their removal, it may impose upon the owner

of the soil that duty, by reason of his interest in the trees he would have a peculiar and distinct incentive in their removal, not common to the rest of the community, and by reason of his situation he possesses the power and ability to do so with greater promptness if he obeys the law's requirements and without burden to him, other than grief occasioned at the loss of their friendly shade and perhaps their beauty. It is true that this ordinance does not in terms determine that such trees are an obstruction to the highways, injury to or interruption to the free and proper use of the sewer nor declare for any reason such to constitute a nuisance, and the absence of such finding or determination a first produced in my mind very serious doubts as to whether the ordinance did not upon its face appear arbitrary and unreasonable, and such doubt is not entirely removed from my mind. The same rules are to be observed in construing an ordinance as prevails in construing acts of the legislature. That is, so as to give them force and effect according to the intent of the legislative body, but the motives which induce its passage are not subject to judicial inquiry.

"Following this unvarying rule, I think it must be held that the evident intent and object of the trustees of the city in adopting of ordinance 295 was for the protection and maintenance of the public sewer; that the city possesses the power and authority to do so and to cause the removal of the trees in question by the owner of the abutting property; that the ordinance is fair, impartial and reasonable, and hence valid."



## Growth of Cities.

### *Public Policy.*

The modern growth of cities is marked as much by the area over which municipal governments spread as by the concentration of population. In our day many causes of concentra-

tion of population are inoperative. Herding together for the purpose of municipal protection against a foreign enemy is no longer a cause of concentration of population. Gathering about great waterpowers to gain the advantages of cheap power has lost force through the competing advantages of steam power. The advantages of water transportation have in like manner lost force through the competition of steam transportation.

Concentration is now induced by industrial, commercial, educational and social advantages. Agencies equally powerful are at work to distribute the mass of humanity brought together by these advantages over constantly widening areas. The mail, telegraph and telephone services, with their accompanying steam and electrical services for the conveyance of persons and commodities are constantly rendering it less necessary that persons and their business shall be kept in close touch, and that different classes of business, or different concerns in the same business, shall be located adjoining each other to obtain the best results.

Manufacturing concerns seek the outskirts of cities, where they can have more room for their works and their employees can have homes. Merchants, professional people and their employes seek homes in the country, where their families can have advantages for comfortable living not to be found in a city, and where they can have rest and recreation after the day's work. These causes are surrounding every city with populous suburbs, as intimately a part of the city as any of its central squares. It is necessary for the welfare of both city and suburbs that a centralized municipal government should spread over the whole area inhabited by those who do business in the city. If this is not done the city will lose greatly in the quality of its electorate. This will place the important interests of the city government in the hands of those having



small interests and a limited knowledge of efficient management. The business interests of those living in the suburbs suffer from this cause. It is the commanding advantages of the city that make the suburbs possible. The inclusion of the suburbs within the city is the logical result of the forces which cause the people to wish to live in or near the city. Consolidation of municipal corporations joining each other is the order of the day.



### **Porch Lighting.**

How to systematically light a city so that each and every tax payer and resident shall be benefitted equally is a question open as yet for discussion.

Many ways are employed at present. Masts supporting clusters of so called 2000 candle power arcs are built ranging from 50 to 175 feet or more in height and are objected to by many because of their expense in first cost and in maintenance also because of the diffused light over house tops and in back yards and if shade trees are maintained, of the dark shadows under the trees.

Arcs suspended upon poles of 35 to 45 feet are good and are generally in use and incandescents are also so placed and are considered good, but I submit now a plan that will remedy all the defects to be found in the above mentioned system and will, I am sure, prove to be the most economical, as well as the best plan to be adopted for the lighting of the streets, particularly in the resident districts, and one that will give to every citizen satisfaction, a strong argument indeed for perplexed Boards of Trustees.

Place your pole line on the back fence line of each block and connect up from the rear to each residence, a line that is to be connected to the porch light.

Install a twenty-five power lamp (incandescent) on the porch or immediately before the front door of each residence.

Pass a resolution installing these lights only where the rays of the same shall have an unobstructed line to the center of the street and this will at once remove the shrubbery from the fronts of the houses of those who want light.

You will then diffuse the light in every portion of the city that is populated and every house will appear a "home" and a most beautiful effect will be obtained.

A light will light the front door and house number, a very good thing as all will admit; the front porch and the steps thereto, the approach from the sidewalk, the sidewalk and also the street to the center thereof, and the light so situated on the opposite house will do likewise.

A lamp can be installed upon the fixture supplied by the resident of the house if he desires a fancy one or can be set in a weatherproof socket by the city if an ordinary light is desired.

The cost of hanging a 25 C. P. incandescent lamp upon a pole with fixture, lamp, wire, etc., without the pole, is not less than \$3.50 each and if a pole is to be figured in a further expense of say as much more will at once be required.

Installation upon a porch will not cost, for wire, lamp, etc. complete, more than \$2.50, and then the expense ceases because the resident supplies all renewal of lamps and the city the current.

If this plan is carried out from the new plan of setting the poles it will be found that only one third the number of poles will be required to light an entire block as would be used under the old system and the cost of the entire lighting of a city would be but one-half the cost of the old methods besides entirely removing the expense of renewals of lamps—an item of great expense surely.

Another thing where the plants are municipal, the cost of connecting up the house is now done away with be-

cause of the house being already connected and there is now better solicitor for house connections than the porch light as compared by the resident of the house with his coal oil lamp or his flickering *under-candle-power* gas jet.

By far the greatest good that will come from the adoption of this system of mine would be the beautifying of the street by day by the removal of the unsightly poles and masts and at night by brilliant spectacles of a row of nicely lighted houses, and a diffused light all over the street and front yards of the city.

Another and good reason for this system becoming adopted is the benefit derived by the Police Department as there is not a dark place between the houses and not a shadow in the block.

This system is now being used by the Morton Street Improvement Club in Alameda where a practical illustration may be obtained of its efficiency.

B. F. LAMBORN.



### Shows vs. Permanent Improvement.

*Editorial Oakland Enquirer.*

The directors of the Merchants' Exchange, as well as the citizens at large, may be congratulated upon the decision that there shall be no street fair held in this city unless it is gotten up as a private enterprise and entirely at the expense of those who promote it. This is in part the result of inquiry into the experience of other cities which have held street fairs and in part the product of the native good sense of local business men. They know the difference between expenditures of money which will be a real and permanent benefit to the town and such expenditures as are merely an evidence that a town has "money to burn." It is a testimony of Riverside, Sacramento, Stockton and other places which have had street fairs that they are an advantage principally to the speculators who got them up and to the fakirs who attended them and gave exhibitions. A

show of this kind draws for a few days a curious crowd of sight-seers, but after it is over the only fact which strikes attention is the assessment of the business men who stand sponsors for the entertainment and make up the deficit. Real business interests are not promoted in this way any more than they are by the visits of a circus, which, though it brings into town for one day a large crowd of country people, has no effect in increasing trade and takes away too much money that business houses suffer for weeks afterward.

There is ample reason for the expenditure of money in Oakland for public purposes, but they should be such expenditures as will leave a permanent mark. Even a Fourth of July celebration, although it may be regarded as a patriotic duty, it is an expenditure of money which is seldom productive. One thousand dollars judiciously expended in beautifying the city or developing some business interest does more good than \$10,000 spent for mere show. The erection of fine public buildings, the making of good streets, the creation of parks and driveways, the placing of public fountains and statues—these are things which make a permanent mark and the money put into them is never wasted. There is no lack of things of this kind which the business men of Oakland can spend money for with lasting good results. For example, at the present moment, there is a great need for the raising of the sum of \$3,000 with which to help out the fund given by Mr. Carnegie for the erection of a public library building. This small amount—small if a number of persons interested is considered—would mean all the differences between the completion of the building on the scale on which the original plans were drawn and the abandonment of some of their features. Now that it has been decided that there shall be no street fair, it would be in order to consider the raising of this amount of money.



## Library Department.

"THE NOBLEST MOTIVE IS THE PUBLIC GOOD."

### First Words.

**I**T is a pleasant feature in the editorial life that one talks with many listeners from time to time, even reaching many that he can never expect to see. Today it becomes our privilege to present to our readers a few glimpses of a great field of human progress, commonly known as the library field. In these few pages only the briefest outline of it can be given, by showing in part, what is being done in Eastern library work, with a few statements of what can early be accomplished here.

California is rich; rich in noble men and finest women. Intellectual power has always been prized in this State and millions of dollars are freely spent in the training of our youth and our young people. California is rich in material wealth; her mines, her commerce, her agriculture and horticulture are prosperous. It is plainly evident that the State has reached that stage of development when broad foundations should be laid for an institution which intimately concerns the highest welfare of the people. This institution is the free public library. Its advantages are many; they can be summed up in one word,—education. This is a term often quoted, often misunderstood. What is its real meaning? One philosopher tells us that "education is preparation for complete living;" another states that "the end of education is wisdom and virtue," while Aristotle affirms that "the general problem of education is to develop children as imperfect beings into perfect ones."

Certainly we recognize in the gradual unfolding and disciplining of all the faculties and forces of a human being a progression, a development which cannot be more aptly described than by the word in question. This progress is

unceasing. It begins at the mother's knee; it continues in the school room and play ground; every hour of social and business life brings its enlargement; no speech heard or book read but what leaves its silent impress. Surely then, when we say of a boy leaving school that "his education is finished," we speak thoughtlessly. The impressive fact is that no man's education is complete till he is in his winding sheet.

If this be true, how important that the State, finding its safety and prosperity through the highest intelligence of its citizens, should, in all reasonable ways, provide for their education throughout lifetime. No agency for this purpose compares in value and effectiveness with the free public library. It belongs to all, for, like the public school, it is supported by general taxation. It is a constant force, for it is open at all needed hours. Its books are for all ages and tastes. The youth of both sexes there find those narratives, both real and unreal, which feed the mind and healthfully exercise the imagination; as older scholars their studies are aided beyond estimate by books of reference; especially to the multitude of children forced to early leave school for bread winning, the public library may stand for constant mental growth and vigorous intellectual manhood and womanhood.

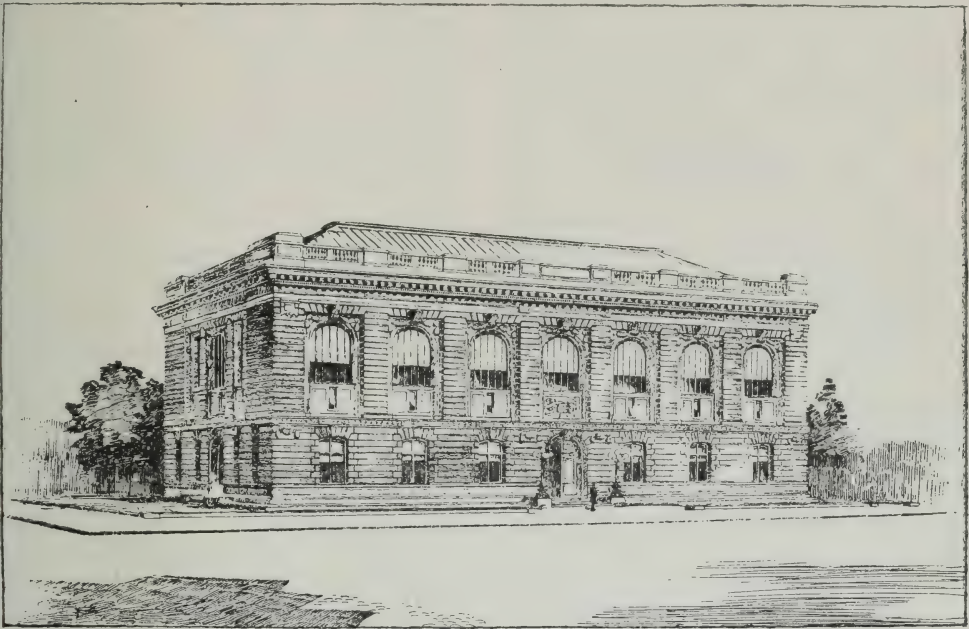
Space allows but passing notice of the boundless recreation given through the library, but it is well known that thousands of tired men and women find in the pages of travel, biography and fiction, a wide and engrossing interest in that most interesting of all subjects—human life.

But it should be needless, in these days, to argue at length the value, the unspeakable worth of a good free library to every city in our land. No

city can afford to be without one; its absence will before long, mean not only lack of public spirit, but contempt for one of the most powerful educational forces of the age. Even frozen Siberia long ago established many well-equipped public libraries in her cities.

California's needs in this direction are, as we interpret them, 1st, a wider recognition of the benefits of the free library; 2d, a complete revision of the general library law; 3d, a suitable system of advisory State supervision. In

trimmings, in the style of the French Renaissance, and is to cost \$47,000. Necessarily, so large an edifice, with so many different wants, could not be ornate within or without, but the treatment by the architects has been admirable for the limited amount of money at command. The first floor contains two rooms, designed respectively for general reading room and children's room, each 42x51 feet, with children's class room and toilets, general store and work rooms in the rear.



OAKLAND LIBRARY BUILDING.

another column mention is made of some desirable amendments which should appear in the new statute.



### **Oakland Library Building.**

The contract for the new library building in Oakland, to be erected through the liberality of Andrew Carnegie, has just been let. The site selected is the centrally-located lot adjoining the Unitarian church, corner of Grove and 14th streets. The structure is to be a basement and full upper story, of light gray brick, terra cotta

The impressive feature of the second floor, with its area of 51x110 feet, will be its open appearance throughout, though divided by an eight foot oak screen into reference and delivery rooms and hall. A trustee's room, 12x18, librarian's, cataloguer's and stock room occupy the rest of the space. Oakland is to be congratulated on the early prospect of a commodious home for one of its most important institutions. Messrs. Bliss & Faville of San Francisco are the architects. We wish we might be able in each month's issue to illustrate some new library enterprise of California.



### **Golden Gate Park Branch.**

The various efforts made by Mayor Phelan for the establishment of a branch of the city library in Golden Gate Park have not yet been successful. A branch is needed for that section of the city. It might be specially designed as a nature library, like the Prospect Park branch of the Brooklyn, N. Y. library. Here is a chance for some one with a spare \$5000 to add his name to the honor roll of Golden Gate Park, on which is now found the names of Lick, Sweeney, Huntington, Spreckels, Mrs. McCauley and others. Who will seize this opportunity?



### **Alms House Library.**

A little library of a few thousand volumes at the San Francisco Alms House is doing a good work, quite unnoticed in the busy city. The building is located in the front of the grounds and has a finely lighted hall, with a stage for concerts and entertainments which are frequently given for the entertainment of the inmates of this sheltering home. The building and fixtures were given in 1898 by James D. Phelan.



### **A California Traveling Company.**

The first free traveling library sent out some months ago to San Andreas, Calaveras Co., a mining town, by the California Club of San Francisco (a woman's organization,) has been a great success. The library was composed of about 50 volumes of new, finely-selected works of fiction, history, travels and biography, besides a variety of magazines which last were to be permanently retained in the community.

The books under charge of one of the merchants of San Andreas, were designed for free circulation; freight charges only being paid by the users. Men, women and children proved

eager readers and on the second day after arrival there was not a book or magazine left in the case. Several books were each read by 50 different readers and all of the so-called popular ones were in constant demand. It is understood that another library is to be sent by the club to succeed the first one, in the early fall.

The plan of sending good literature in this manner to circulate in destitute regions is one of the most fruitful philanthropic ideas of the age; women's clubs in more than a score of states are now carrying forward such work. Through the visit of this particular library it is probable that a public library will, sooner or later, be organized in San Andreas. All honor to the California Club for this pioneer effort.



### **The General Library Law,**

Few finer services can be rendered by the League of California Municipalities than by aiding in the thorough revision of the general library law. The present statute is twenty years old; the existing free libraries are organized under its provisions; it has served a useful purpose but it has been outgrown; new conditions require ampler legislation. Some of the needed changes may be mentioned as follows:

The appointment of boards of library trustees, in cities of less than 100,000 population, by the mayor, or by election by boards of city trustees, instead of election by the people. Delays are prevented; trustees will be chosen with more care. Vacancies to be filled and removals made by the same appointing powers.

In the East it is generally deemed best that but one member of the local city government should be allowed to be a library trustee. It is an excellent idea to provide that the County Superintendent, the City Superintendent of Schools, or Supervising Principal as he is sometimes called, should be, ex-

officio, a member of the local library board.

Provision for gradual change of membership should be made. In Ohio library boards consist of six members, two members retiring each year. On their first appointment, they divide themselves by lot into three classes whose terms expire in one, two and three years.

The eligibility of women as library trustees (secured by act of 1874) should be recognized in the general law,

Require the Secretary of State to furnish each free library with copies of all State laws and State reports hereafter published.

Provide that every library and reading room maintained under this act shall be forever free to the inhabitants of the town creating it, and to non-residents who are tax-payers in it, subject to reasonable regulations adopted by its trustees.

Some form of advisory State supervision is urgently needed; this will be discussed in a future number.

The new law should make the operation of a library more efficient by providing a penalty for the wilful detention of any book, magazine, or other property belonging to any public or incorporated library, for a period of 30 days exceeding the time allowed by the library rules. (A stringent statute concerning the defacing and destruction of books etc. is now in force.) Massachusetts and New York have legislated against this evil.

Authorize County Boards of Supervisors to contract with public libraries in their own counties for the circulation of books to non-residents; this will allow the use of local traveling libraries. The importance of this clause will more fully appear by discussion in a future issue. It is in line with recent satisfactory legislation in Wisconsin.

Removal of the existing limitation of one mill on the dollar tax. Let every city, except those limited by their charters, appropriate the maximum amount

it desires. Several of the New England States and some others occupy this broad ground. No progressive state narrowly limits taxation for public schools. It is coming to be recognized that free libraries are just as important to the intelligence of communities as free schools.

Enact that all cities of less than 100,000 population in which free libraries are now located, shall, unless prohibited by their own charter, hereafter annually appropriate not less than one-half mill on the dollar for the maintenance of the library and reading room; to take effect within two years from the passage of this act. Also that all free libraries hereafter founded under this act, shall, within two years after organization, receive the half mill rate of support.

Enact that on petition of 25 per cent of the taxpayers of any incorporated city having no free library, the trustees or supervisors of the city shall immediately establish a free library and reading room. A compulsory feature relating libraries is not wholly new in this State; it is the prominent provision of the serviceable school library law of California, which is probably the most efficient one in the United States. The school law of this and many other states prescribes compulsory education; no one is forced to use the public library, but the people should demand that all who wish should be allowed the opportunity.

Give authority to cities to impose a special tax for one or more years, or to issue short term bonds, for purchase of lot and erection of library building, to be decided by the voters at some election. Many small places can thus raise \$5,000 or more, in installments, during a few years without feeling the burden; and so secure a permanent home for their library. One of the pressing needs of San Francisco and Los Angeles is a large fire proof library building. Perhaps some one of their wealthy citizens may make such a



donation—thereby ensuring his perpetual happiness. In any event, let full authority be given to all cities to provide their own library buildings. Specify what authority, city or library trustees, shall have power to let contracts.

(It is understood that the words "city" or "cities" used in these lines includes all incorporated towns.)

After careful consideration and full discussion, let a bill be prepared for the action of the legislature; a bill not confined to the wants of the present day, but which, wisely forecasting prospective needs, shall aid in placing California in the front ranks of library progress.



Is a free public library established in your city? If not, and the place is incorporated, what is the reason? Why not begin agitation for one?



### Children's Rooms.

The July *Review of Reviews* has a very interesting illustrated paper on "The Provision for Children in Public Libraries." It shows numerous engravings of rooms which have been set apart for children's use in the large libraries in the country. Ten years ago the Brookline, Mass., library began the use of such a room and now more than 30 of 125 reading libraries have adopted the idea.

In these apartments the juvenile books are placed on shelves within reach of the children; files of their periodicals are arranged on low desks; pictures are hung on the walls, and a sympathetic attendant is constantly in charge. Some libraries provide dissected maps and drawing cards. These rooms in stormy weather are frequently crowded to their full capacity; no department of the library work is more promising than this; its foundation exists in the fact that "the child is father to the man."

The San Francisco library maintains

such a room, though badly hampered for space; Alameda provides an alcove; Los Angeles devotes a fine apartment, and Pasadena, in the new extension, is building one.



### American Library Association.

The 22d Conference of the A. L. A. was held in Montreal in June, with the large attendance of 450 librarians and trustees. California was represented by Librarian J. C. Rowell of the State University library.

Many valuable papers relating to library work were presented, especially in connection with the rapidly-growing feature of Children's rooms and literature. The president's report, reviewing the last ten years of library progress, stated that library commissions, appointed by Governors, whose object is official advisory aid and expert assistance, exist in seventeen states; while in twenty states there are state library associations for cooperative effort of library workers. There are four library schools for the scientific training of librarians, a number of summer schools for the instruction of library assistants in particular, and two excellent library journals. Traveling libraries, carrying books and periodicals to sparsely settled regions, have been very successful in thirty states; libraries are cooperating with schools as never before, and, with numerous donations for buildings and endowments, the cause is obtaining a breadth and solidity of supreme importance.



### Summer Schools.

Summer schools of library science are being held this season at Minneapolis, Madison, Cleveland, and Amherst, Mass. The term averages six weeks. The schools are held for the librarians of small libraries, assistants in larger ones and applicants for positions; they prove extremely valuable in supplying some technical knowledge of the pro-

fession by direct instruction. It is reasonable to hope that a summer school will be held in Berkeley in 1901, though it is too early to confidently predict that the wishes of many of our library workers will then be gratified.



### Carnegie's Gifts.

Andrew Carnegie, the princely giver to free libraries, was born in Scotland in 1835 and began life as a worker as a bobbin boy in Pennsylvania at \$1.20 per week. Successively he became a messenger boy, telegraphic operator and dispatcher, railroad superintendent, speculator in oil and owner in iron works. Now, a multi-millionaire, intensely believing in the benefits of the public library, he declares that "the best gift that can be made to a community is a free public library." His donations are made on a sound business basis; he requires in nearly every instance that the city to be benefitted shall furnish a suitable site and guarantee ample support. In the last two years Mr. Carnegie has aided 51 libraries to the amount of over \$4,500,000; his total gifts to libraries amount to \$9,600,000. Oakland and San Diego are each receiving \$50,000 for library buildings from Mr. Carnegie.



### Coast Notes.

#### COAST NOTES.

OREGON—The Portland, Oregon, Woman's Club has taken up the work of securing a general library law for their state. It advocates a measure which requires every incorporated town to establish a free public library, with a minimum annual tax of one-fifth of a mill on the dollar. The State Federation of Women's Clubs also adopts the plan and will spare no effort to obtain this desirable legislation.

CALIFORNIA, St. Helena, Napa Co. The annual report of the St. Helena public library shows that when the

town took charge of it in 1892 there were 537 vols.; this number has increased to 1770, with a total circulation of 4,000. The annex contains papers, periodicals, games and a billiard table.

SACRAMENTO—Miss Caroline G. Hancock, librarian of the public library for over a score of years, has resigned, and is succeeded by Mr. L. W. Ripley, the former assistant librarian.

BERKELEY—Mr. C. K. Jones has resigned his position in the university library and accepted one in the library of Congress. Miss Anna Fossler of Lincoln, Neb., a graduate of the Albany library school, becomes cataloguer in the university library.

Stanford University library receives the valuable law library of the late Justice Field, presented by Mrs. Field.

SANTA CRUZ—The library appropriation for the last year was 7 cents on the hundred. Installed in their spacious new room, with increasing public appreciation of the work, the library trustees now ask for a larger income.

SANTA BARBARA—An excellent condition of the city library is shown by the late report of the trustees, with an income of a thousand dollars for the past year in excess of the sum received by taxation. There are 13,000 volumes in the library and the total circulation for the 12 months has been over 41,000.

NATIONAL CITY, San Diego Co., has a library distinguished through the wisdom of its founders in 1896 for obtaining the maximum tax of a mill on the dollar. It reports 2000 vols., with circulation of 5500.

ORANGE, a small city, has an assessed valuation of \$388,000; it raises the full amount allowed of \$388 per annum, a sum totally insufficient for the needs of its excellent library of 2500 vols. Needful expenses consume most of the income, thus illustrating the importance of removing the present restriction in the library law of one mill on the dollar. If Orange and other small



places, wish to appropriate \$1000 per annum for their library, no legislative act should forbid. Local estimate of the library work is shown by the registration of nearly 1,000 in a population of about 1,500.

REDLANDS has a gratifying review of increased attendance and circulation. The opening of the library on Sundays and holidays has been highly appreciated. Its home is in the building—a gem of architectural art—erected and donated by Albert K. Smiley. No tourist fails to pay a visit to this beautiful structure. The trustees ask to have the appropriation increased from 8 cents to 10 cents, the maximum amount authorized.

RIVERSIDE shows the surprising advance in library affairs (may it become less rare elsewhere!) of an appropriation increased from 5 cents to the maximum limit of 10 cents. This insures a more ample supply of books and the replacing of many worn volumes of standard works. The duplication of popular works at a charge of 10 cents to the user proves satisfactory. There are now over 11,000 volumes on hand; the yearly circulation has been 60,000. The health of Mrs. Mary M. Smith, who has been in charge for 10 years, has given way and she has had leave of absence to go abroad for a number of months.

LOS ANGELES—The public library will soon commence sending traveling libraries to the fire engine houses, a work that should be begun in every large city in the land.

Will not some generous soul donate a sum to the City Library of San Francisco for the establishment of such a work among our firemen and policemen? It is a splendid thing to raise money for the family of a fireman who gave his life for humanity, but why not do something for these noble fellows in their lifetime?

SANTA ANA—Public library's annual review shows that possessing but 3400

vols.; the circulation for home use was the large one of 22,000. The small increase of income allowed this year, though serviceable, is evidently far too small for the needs of Santa Ana. The time is coming when city officers throughout California will look back with amazement upon the small amounts they have been willing to appropriate for this most effective means of popular education—the free library.

Is the card-index system for cataloguing in use in your library? If not, send to Payot, Upham & Co., San Francisco, for circulars and price list. It is the only up-to-date system.



### Pasadena Library.

Few, if any, public libraries in California have made greater gains in the last two years than that of Pasadena, of which Miss Nellie M. Russ is librarian. This library has 15,000 vols., and the increase of home circulation in the 24 months has been over 24,000, owing largely to the adoption of open shelves, the two book system and active co-operation with the schools. An addition is now being made at a cost of \$9000, to afford a children's room and more space for the reference department and work room. It is gratifying to note the increase in salaries to the librarian and assistants. We hope the time is not distant when competent chief librarians will be paid as much as the best teachers. Scholarship, proficiency—acquired by special training or long experience—familiarity with every department of bibliography, and unremitting attention to the wants of the community are essential to a librarian's success. The reward, both in salary and vacations, should correspond with the requirements; it is poor economy for any library to deny a suitable vacation to a faithful employee; the best service can not be rendered without an occasional change.

Hollister has an Odorless Excavator for sale. See ad.

## Garbage Disposal in China.

### *Municipal Engineering.*

Some time ago the agricultural department became interested in the study of the disposal of garbage, sewerage, etc. in foreign cities, and solicited the aid of the state department in obtaining information. The department directed the consular officers of the United States to forward all information obtainable.

An uncanny tale comes from Consul Fowler that makes the reader feel creepy. He says.

"The cleanest cities in China are Hang-Chow and Ning-Pox. In the center of those two cities I have myself seen dogs eating bodies of babies; the rotting corpses of cholera cases; snakes slowly winding in and out; many dogs, slime, dead cats; in fact, the most horrible filth on one side, while across the way the glitter of gold, pomp and luxury; such are the principles of a Chinese street. The garbage collector is the beggar or the starving dog."

Consul Ragsdale writes from Tien Tsin that "all animal food is comparatively costly and the mass of the people are poor. The methods are from house-to-house collection. The work is done by private enterprise and the material deposited in vacant lots and in front of houses where the owners do not employ the collector. Tin cans are much prized by the natives and are a regular article of commerce. When beyond use as a bucket they are flattened out and made into anything from a candlestick to a bath tub—the latter being used only for foreigners. Broken glass is reheated and made into lamps and curios, snuff bottles, etc. All of this is collected by private enterprise and the sorting is done in any place most convenient to the collector. Household waste waters are thrown into the empty pools at the side of the streets and eventually this water is used for street sprinkling. The streets

and the passers-by are sprinkled by means of long-handled ladles.

"The street refuse collections are made by men and boys with a basket and a small long-handled ladle or shovel. The basket hangs on the back from the left shoulder and great skill is shown by some collectors in scooping up everything and throwing it into the basket without a loss. This material is taken to some bright, sunny and convenient locality, mixed with two parts of street dust and made into cakes the size of an orange. These cakes are sun-dried and sold as fertilizers. The most convenient place for a foreigner to study the details of these methods is the stone bridge on Legation St. It is only a few hundred yards from the two foreign hotels and the French, German, Japanese, English, Russian and American legations. The bridge being thus centrally located with a wind-swept stone floor exposed to the sun, possesses all the requirements of a first-class fertilizer dryer. It is in daily use. The sewer system of Pekin is certainly a combined system. Everything combines in the streets. No filters are used. The supply of street sweeping exceeds the demand by about three inches in depth."



### **Boston's Automobile Engine.**

The horseless fire engine in Boston seems to be a success. The engine can throw 1,350 gallons of water a minute, which is forced through 50 feet of leading hose, and out of a 1¾-inch nozzle, for a distance of 338 feet. The city has two engines of this kind, and will place another one in service shortly. It is estimated that the cost of keeping the constant stream pressure of 90 pounds in the auxiliary boiler is about the same as the cost of keeping three horses in the stalls. In addition to the two engines in Boston, there is one at Hartford, and one at New Orleans. Pittsburg has placed a contract for one with the builders.—*City Government.*



### A Big Institution.

Many of our readers may recall an item in the daily papers about a year ago concerning Claus Spreckels and his intention to go into the business of manufacturing sewer pipe. In connection with the installation of the plant of the Independent Electric Light and Power Co. and the laying of the wires underneath the surface of the streets of San Francisco, it became necessary to obtain a large quantity of conduit piping. The pottery companies in the combina-

Sewer pipe is another production of this establishment. With the aid of the very latest and most effective type of clay working machinery using the very best of material, and undergoing a process that insures the most perfect vitrification, a quality of salt-glazed, vitrified, iron-stone sewer-pipe is produced that cannot be excelled.

So carefully and thoroughly is the work done that there are no culls nor seconds, and the quality is extremely uniform. This is a very desirable consideration for the users of this material.



WORKS OF INDEPENDENT POTTERY CO.

tion asked too high a price in the opinion of Mr. Spreckels and that gentleman stated that he would go into the pottery business himself. After investigation and the securing of some of the best clay beds in the State, the works were established at the corner of Sansome and Union streets, San Francisco, and for the past six months have been turning out a vast quantity of conduit pipe which has been placed in the streets of San Francisco, to be used by the Independent Light and Power Co. In this work 1,750,000 lineal feet of pipe has been used.

Furthermore, city officials will be pleased to know that it is the intention of this concern to at once commence the manufacture of vitrified brick for street paving purposes. This material is used very extensively in eastern cities for paving purposes and the testimony of experts is that it is the cheapest and most durable of pavements, presenting a surface quite smooth, easily cleaned and nearly noiseless. In the construction of gutters it is better than Basalt blocks, and used with asphalt and cement makes a splendid cross-walk. It is probable that several miles of street paving with vitrified brick will be constructed within the next year.

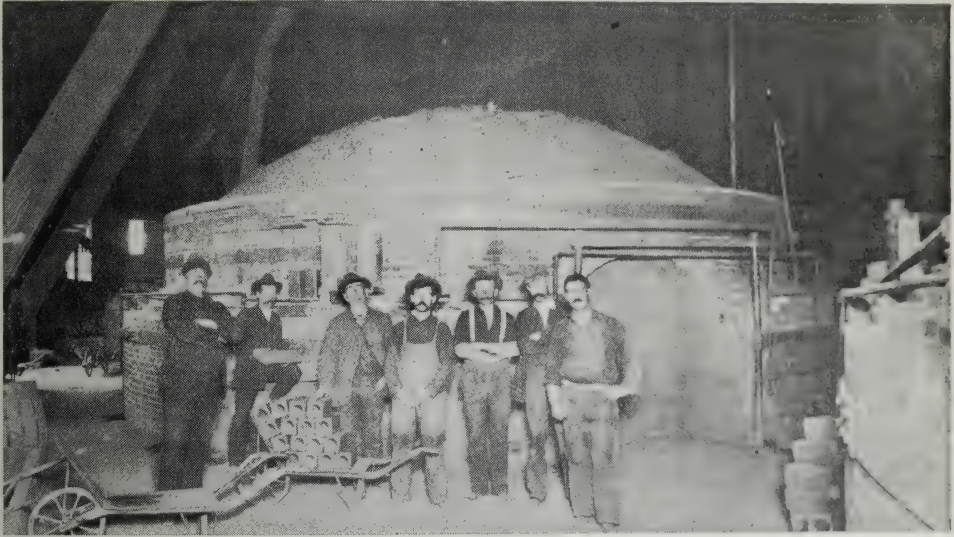
Geo. F. Gray, of Gray Bros. (the well known contractors) is the president of the company and J. M. Taylor, Secretary of the Electric Light and Power Co., is the secretary. The office is at 228 Montgomery St. San Francisco.



### National Municipal League.

The program of the annual convention of the National Municipal League to be held in Milwaukee in September gives promise of a series of most interesting sessions. There is a variety

ment," by Rev. Washington Gladden, D. D., of Columbia, Ohio, who was recently elected an alderman of that city; "The Government of the City of Glasgow," by Rev. Albert Lazenby, recently of the city of Glasgow; "A Year's Municipal Development," by Clinton Rogers Woodruff, of Philadelphia; "The Model Charter, a Practical Experiment of Long-tried Principles, Not an Innovation," by Prof. Frank J. Goodnow, of Columbia University; "The Model Charter and Wisconsin Cities," by Hon. Joshua Stark, President of the Wisconsin Bar Association;



VIEW OF THE KILNS, INDEPENDENT POTTERY CO.

of papers to be read by prominent members of the League which will lead to general discussion and the dissemination of new thoughts and ideas that cannot but prove of advantage to all those who may attend the convention. The program of the meeting, which will cover a period of three days, includes the following topics: "The Essential Elements in Good City Government," by Charles J. Bonaparte, of Baltimore; "The Representation of Different City Interests in the Council," by Hon. William Dudley Foulke, of Richmond, Ind.; "The Influence of Public Service Companies on City Govern-

"Does the Model Charter Confer Dangerous Powers on the Mayor?" by Charles Richardson of Philadelphia; "The Model Charter and Small Cities," by Prof. S. S. Sparling, of the University of Wisconsin, who is also an alderman of Madison; "The Growth of the Municipal Reform Idea in the West," by Dr. Amos P. Wilder, of Madison, Wis. Other questions including a discussion of the proper extent of governmental action in American municipalities will be discussed by eminent reformers and students of municipal government. Controller Coler, of New York, will be among the speakers if his engagements will permit.



## What the Cities are Doing.

Healdsburg's streets are being sprinkled.

Redondo streets are being treated with oil.

Alameda's new charter will be voted upon on August 31st.

Santa Ana is investigating as to the cost of a fine alarm system.

Monterey is considering a bond issue for several needed improvements.

Pasadena's new charter is completed and is in the hands of the Trustees.

Anaheim is considering adopting the meter system for supplying water.

Oakland Newspapers are trying to work up a sentiment in favor of a new charter.

Vallejo contemplates improvements to its water works at an expense of \$60,000.

Pleasanton will commence the construction of its new water system without further delay.

Marysville will receive bids for a combined chemical engine and hose wagon on August 23d.

Redwood City is about to expend \$8,000 in the improvement of its municipal water system.

Santa Barbara is figuring on establishing a salt water plant for street sprinkling purposes.

Radcliff & Reese, who have the contract for Ferndale's new sewer system have commenced the work of construction.

Ross Valley Sanitary District will have an extensive sewer system, \$40,000 of bonds having been voted for that purpose.

San Jose is talking about amending its charter so as to get rid of the "Vrooman Act" which the present charter adopted as the city's street improvement law.

Emeryville and Oakland have agreed to cooperate in the construction of a main sewer which will run from the extreme northern limit of Oakland through Emeryville to the bay.

Riverside has had good financial management during the past two years. A deficit of \$10,000 has been reduced to \$2000, and at the same time nearly \$12,000 has been expended bettering the electric light works.

Alameda recently advertised that bids would be received for furnishing oil for fuel to be used at the electric light works. Notwithstanding that oil men are proclaiming that oil is the cheaper fuel, not one bid was received.

Santa Clara has purchased the street mains, meters and services of the San Jose Light and Power Co., and the same will be used as a part of the town's municipal gas system which is now in course of construction. The price paid was \$7,400.

Suit has been commenced to test the legality of Redondo's recent bond issue. The point raised against the issue is that the bonds are for street improvements, and it is claimed that this purpose is not within the scope of "other municipal improvements" as used in the bond improvement act of 1889.

Lemoore, Kings County, voted to become incorporated as a city of the sixth class on July 24. City officials were elected as follows: For trustees, Robert A. Moore, Charles H. Bailey, Dr. R. E. Foley, Carson Dahukien and M. Howell; for city clerk, W. F. Holser; for treasurer, F. L. Powell; for Marshall, J. W. Dockstader.

The following Freeholders have been elected to frame a new charter for Los Angeles: Dr. J. R. Haynes, W. A. Spalding, N. P. Conrey, J. A. Anderson, Jacob Frankenfield, A. B. McCutcheon, R. J. Colyear, Harry Chandler, Gen. John R. Mathews, J. B. Miliard, Octavious Morgan, A. W. Hutton, F. M. Parker, Sherman Page, H. G. Wilshire.

Ukiah is now the owner of its own municipal electric lighting system. The Ukiah Dispatch of July 22 says: "The arc lights on the streets were turned on for a short time Monday night and on subsequent nights they were run until midnight. A number of incandescent street lights have been put in in the residence portion of the city, and they are very satisfactory. Some slight adjustments will be necessary before the arc lights will give a perfectly steady illumination but this will soon be regulated."

\*\*\*

### Personal.

Thomas Scott has been appointed attorney for the town of Livermore.

B. F. Lamborn, who has for six years been city clerk of the City of Alameda, is representing the Independent Pottery Company and is looking after the business of the concern on the coast.

## Subways in Cities.

*Bakersfield Echoes*

The subject of subways is one that should not be considered exclusively in connection with great cities. It would be a great advantage if it were made a feature of every center of population having underground conduits of any kind.

A plan that has always seemed to us to be sound is for the municipalities to lay absolute claim to the space under the sidewalks, and require all pipes and wires to be laid there. As fast as a street is improved with substantial buildings, the city makes a conduit of considerable size by placing a brick wall on the curb line and sunk to the depth required by the demands of the city, with another wall back some three or four feet toward the property line. In this continuous subway all pipe and wire companies are to have space and are to pay rent for it. Repairs and connections could here be easily made and the streets would not have to be torn up at any time.

The present method of giving, free of rent, the use of the middle of the street and allowing it to be constantly torn

up, is unbusiness-like in the extreme.

\*\*\*

## Municipal Baths in New York.

It may not be commonly known that New York State has a law which requires that cities of the first and second classes shall erect and maintain free public baths. A bill was introduced in 1895 making the establishment of baths compulsory upon cities of the first and second class. The provisions, briefly, are that such a number of free baths shall be established as the local Board of Health may deem to be necessary. Each bath shall be kept open not less than fourteen hours each day, and hot and cold water are to be provided. The erection and maintenance of ocean or river baths are not deemed a compliance with the law. Buffalo and Rochester have already complied with the law, and Albany and New York City have the work under way.—*City Government*.

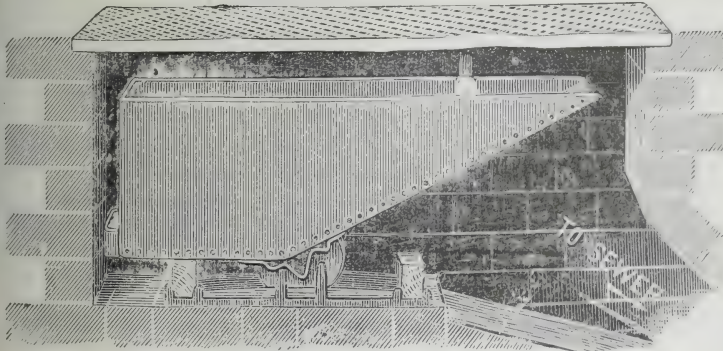
\*\*\*

## Salt Water Sprinkling.

The sprinkling of the streets with salt water was begun Saturday, from 18,000 to 20,000 gallons being used daily. The new arrangement has proved a great relief to the water-works and the results are satisfactory. As the water is pure, being pumped only at high tide, it is believed no unpleasant features will be noticeable later in the season as was the case last year.—*Redwood Democrat*.

# Alameda Automatic Sewer Flusher.

SURFACE OF SIDEWALK.

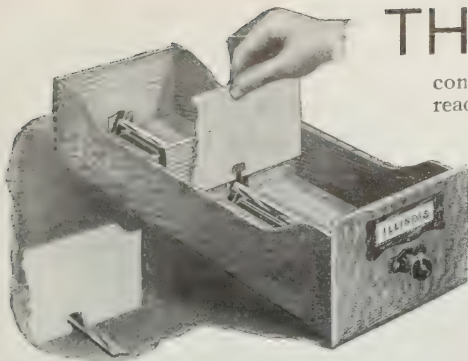


The only Sewer Flusher that works automatically and needs no attention. Perfect satisfaction. 1000 in use.

**Independent  
Pottery Co.**

228 Montgomery St.,  
San Francisco.





SINGLE DRAWER OR FILE.



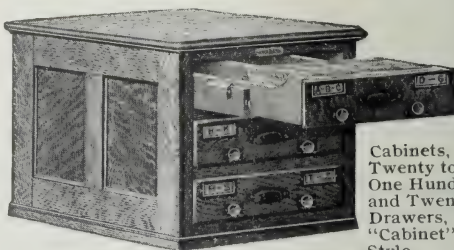
BUILDING A SECTIONAL STACK.

CABINETS,  
ONE TO  
SIXTEEN  
DRAWERS,  
"BOX"  
STYLE.

# THE CARD SYSTEM

concentrates business information and REDUCES ready reference to a science. Time is saved and business prospects are converted into profit by

## The Wabash-Rival CARD INDEX SYSTEM.



THREE DOUBLE DRAWER CARD INDEX CABINET.

Cabinets,  
Twenty to  
One Hundred  
and Twenty  
Drawers,  
"Cabinet"  
Style.

## The Rockwell-Wabash

### EXPANSION BUSINESS SYSTEMS

combine ALL features of Standard Filing Cabinets, including CARD INDEX CABINETS, P. H. CASES, LETTER FILES, DOCUMENT FILES, CATALOGUE FILES, LEGAL BLANK FILES, COMMERCIAL REPORT FILES, ETC.

If you are ambitious to extend your trade, tell us your line and we will send you our Catalogue.

Specially adapted for Public Offices, Abstract Offices, Etc.

**Payot Upham & Co.** 204 Pine St.,  
San Francisco.

Address Cabinet & Typewriter Dept. Mention this Magazine.

ANYTHING NEW, WE HAVE IT.

# STREET SIGNS.

If You Want Something

Attractive

Durable

Convenient

TRY OUR ENAMELED STREET SIGNS.

THEY ARE THE CHEAPEST IN THE END.

Send for Sample Sign.

**San Francisco Enameling Works,**

851 Market Street.

### A Good Showing.

The city clerk of Anaheim has just submitted a report of the municipal water and light works of that place. According to the figures, the water works made a net profit last year of \$528.86, and the electric light works returned a surplus of \$513.42. This is after deducting interest on the debt,

five per cent. depreciation on the original cost, and the payment of the annual installment of the bonded debt. This is a very creditable showing.

The San Diego Council has adopted a report of a special committee that provides for leasing the distribution system of the United Water Company, and the ultimate issue of \$600,000 bonds with which to extend and purchase the same.

### JOHN MARTIN & Co.,

31-33 New Montg'y St., San Francisco, Cal.

Stanley Electric Manufacturing Co.,  
Pittsfield, Mass.

### Electrical Machinery.

The Pittsburgh Reduction Co.,  
Pittsburgh, Pa.

### Aluminum Wire.

Stanley Instrument Co.,  
Great Barrington, Mass.

### A. C. Wattmeters.

Fred M. Locke,  
Victor, N. Y.,

### Insulators.

## To All Who Want Anything.

If you want prices or information on anything, write to us and we will promptly put you in the way of getting it without charge.

### California Municipalities,

Room 14, Eighth Floor, Mills Building,  
SAN FRANCISCO.

Directors: H. OUTARD  
C. B. STONE  
T. B. BISHOP  
J. W. McDONALD  
W. E. DENNISON

**CITY STREET IMPROVEMENT CO.**



**GENERAL CONTRACTORS**

J. W. McDONALD,  
PRESIDENT  
W. E. DENNISON,  
SECRETARY

**BITUMEN MINES:**  
SANTA CRUZ,  
MONTEREY AND  
SAN LUIS OBISPO  
COUNTIES

**CONSTRUCTORS**  
STREETS, BRIDGES,  
RAILWAYS, RESERVOIRS,  
WHARVES, JETTIES,  
AND SEA WALLS

**MILLS BUILDING:**  
FIFTH FLOOR, ROOMS 10-11 12 & 45

San Francisco, CAL.

TELEPHONE MAIN 5377.

Preserve all  
copies of this  
Magazine.  
They may  
be valuable  
sometime.

## The Tracy Engineering Co.,

151 Fremont St., San Francisco.

Nordberg Corliss Engines.  
Allfree Automatic-Expansion Gear Engine.  
Shepherd High Speed Vertical Marine type Engine.  
Prescott Duplex Steam Pumps.  
The Tracy Automatic Damper Regulators.

The Tracy Steam Traps.  
The Tracy Cooling Tower and Condensing System.  
Wainwright Feed Water Heaters, closed type.  
Brownell Feed Water Heaters, open type.

Contracts taken for Complete Pumping and Lighting Plants. Plans and specifications and estimates furnished.



## Special Blank Books

Made to order for

Public Officials,  
Private Citizens.

If you want books of special design, ruling, etc., we will make them and give you the benefit of our experience in doing such work.

**A. CARLISLE & CO.,**

417 Montgomery St., San Francisco.

YOUR ONLY HOME COMPANY.

## The Pacific Mutual

Life Insurance Co., of California.

Offers the Best Policies

Life, Endowment,  
Health and Accident  
With Unequalled Security.

Paid Policyholders, - \$11,000,000.00

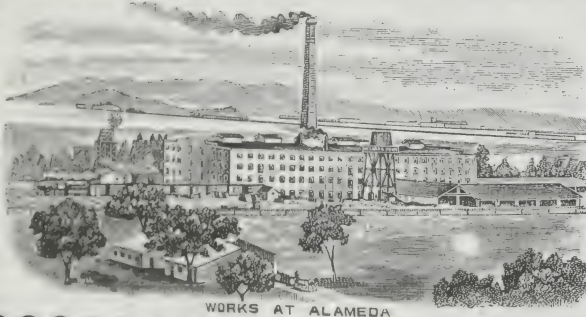
Home Office, Pacific Mutual Building, S. F.

## Civic and Social Problems.

A Monthly Magazine devoted to the discussion of civic and social questions; Rev. G. E. Scott, editor, with a brilliant list of contributors. Price \$1.00 per year. Send for FREE SAMPLE COPY to 14 Grant Ave., San Francisco, Cal.

**GLADDING McBEAN & CO.**  
MANUFACTURERS  
ARCHITECTURAL TERRA COTTA  
HOLLOW TILE FIRE PROOFING  
SEWER AND CHIMNEY PIPE  
PRESSED BRICK, DRAIN TILE, ETC.  
1358 & 1360 MARKET STREET, S. F.  
MANUFACTORY AT LINCOLN, CAL.

**PATRICK & CO.**  
RUBBER STAMPS  
STENCILS, SEALS, BRANDS, ETC.  
318 CALIFORNIA ST. SAN FRANCISCO.



WORKS AT ALAMEDA

## N. Clark & Sons

17-19 Spear St.

SAN FRANCISCO, CAL.

Manufacturers

CULVERT PIPE

WELL TUBING

FLOWER POTS

VASES, FILTERS

DRAIN TILE, Etc.

# CALIFORNIA MUNICIPALITIES

VOL. 3.

Santa Clara, Cal., September, 1900.

No. 2.



SCENE IN WESTLAKE PARK, LOS ANGELES.

SAN FRANCISCO OFFICE,  
Room 14, 8th Floor, Mills Building.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.

Published at Santa Clara, Cal.



LATEST, GREATEST, BEST

# WORK OF TRAVEL

EVER PUBLISHED.

## JOHN L. STODDARD'S LIFE WORK

In Enduring Form. A Complete Edition of the Identical Travel Lectures delivered by Mr. Stoddard during the past 18 years.

TEN SUPERB CROWN OCTAVO VOLUMES.

The Complete Library of Travel, embracing every place in every land that allures the traveler.

**THE WHITAKER & RAY CO., 723 Market St., San Francisco.**

Write for free specimen pages.



## Use Yates' Paint

On all Public Work.

It is DURABLE.

Manufactured in  
San Francisco, at 117-119 Market Street.

**FABRIC FIRE HOSE CO.**  
68 MURRAY ST. NEW YORK.  
W. T. COLE, GEN. MANAGER.

PATENTEES AND SOLE MANUFACTURERS OF  
**WAX AND GUM TREATED**  
FIRE HOSE

San Francisco Headquarters at 509-511 Market St.

New York Belting & Packing Co., Ltd.

# P & B

## Building Papers

## Ready Roofings

ALL DEALERS

MANUFACTURED ONLY BY

## Paraffine Paint Co..

## San Francisco

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 3. September, 1900. No. 2.

## California Municipalities.

Published Monthly.

H. A. MASON, Editor.

Office of Publication, SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

## COMMENT.

**Public Ownership and Business Methods.** The opponents of Municipal Ownership are doing a serviceable work in calling public attention to the lack of business methods in the conduct of public affairs. While it is put forth as an argument against the operation of public service industries by the municipality, it is at the same time a strong force in awakening the sense of public officials and private citizens to the necessity of adopting business methods and the securing of competent men to attend to the public interests.

"Unless the operation of public service industries can be accompanied with proper economy and with a due regard to sound business principles, it will be wiser for municipalities to contract for such service from private individuals," says a prominent writer. This is all very true, but is there any particular reason why the operation of such industries cannot "be accompanied with proper economy and with a due regard to sound business principles?" The writer knows of several instances in this state where municipal water and light works are so conducted and the result is that public ownership in such

## CONTENTS.

### EDITORIAL:

Public Ownership and Business Methods	39
Where Good Work Can be Done	40
Not an Easy Undertaking	40
Some Statistics on Street Sprinkling	40
The Imperative Mandate	41
Two Other Charters	41
Some Good Points	42
The Next Convention	42
Notes	42
Public Utilities in San Francisco Under the New Charter—Chas. Wesley Reed	43
Sewage Purification—E. A. Herrmann	49
Cost of Street Sprinkling in Certain Cities	54
Curiosities of Municipal Ownership	56
Public Playgrounds	57
Dusty "Dustless" Roads	59
Uses of a Municipal Lodging House	59
Women as Germ Scavengers	60
What Cities Tax Telephones	60
Some Tax Rates	61
A Park With Novel Features	61
County Licenses in Cities	61
What the Cities are Doing	62



cases has achieved wonderful success as compared with the former operation under private ownership. Without business methods, the measure of success would not be as great, or possibly the service would not be equal to that supplied by private endeavor, or the cost might be more.

The writer also suspects that there are several municipalities in the state where municipal water and lighting plants are not properly managed. The time is coming—perhaps quickly—when these cases will be publicly stated and the attention of citizens called to the fact that their public works are not being prudently conducted. And when the citizens see what they are losing, as compared with cities where sound business principles prevail, there will be a demand for a change of administration—and it will come.

In other words, public ownership is liable to bring about that which is most desired—public economy—by bringing home to the citizenship the necessity therefor. Of course it would be better for the municipality to adopt sound business methods prior to attempting to operate public utilities; and if they do so attempt without first inaugurating proper methods in all public matters, the venture will not be productive of wholly satisfactory results. Ultimately, however, the necessity for the adoption of sound business will be so apparent that economy will prevail.



**Where Good Work Can be Done.** Now the reader can see where some splendid work can be done by such an association as the League of California Municipalities. By the systematic gathering of statistics of municipal operations and the publication of the same, comparisons may be made and the cities blessed with honest and efficient management will be readily discovered;

likewise those cursed with dishonest and inefficient management will be easily detected. Then there will be an opportunity to do reform work and apply intelligent effort to the bettering of municipal government.



**Not An Easy Undertaking.** One would imagine that it would be an easy task to do this; that the publicity of municipal statistics could be done at once. Now this is a mistake. There is nothing so difficult to obtain in the statistic line as those dealing with municipal government. There never has been, until recently, any effort made to obtain them, and now when the attempt is being seriously made, we find the systems of accounts and reports are so different in the several municipalities that the figures given furnish scant information. So before we can get reliable statistics we must introduce some approximately uniform system of reports and accounts. Naturally that must be the first work of the League of California Municipalities, and that is the work that is now being undertaken



**Some Statistics on Street Sprinkling.** Elsewhere in this number of MUNICIPALITIES, will be found some statistics on the cost of street sprinkling in certain California cities. The League's Secretary was asked to obtain them, and after considerable effort got some returns. The data is published just to show how little information is given. To be sure, in nearly every case the cost per mile for sprinkling streets can be figured out—approximately; for be it noticed that the miles of streets is largely guess work. Yet the "cost of street sprinkling per mile" is not a proper basis for comparison. In many cases streets have to be sprinkled double width; sometimes only one width of the sprinkler. Furthermore,

in some cases a thousand gallons of water may be spread over a distance of half a mile; in other cases it may be applied only half that extent. The proper basis for comparison would be the cost of applying a given quantity of water to the streets. On such a basis the figures given by Los Angeles and San Francisco are without value. Yet there is some information in the statistics. It will be noted that Los Angeles is the only city that contracts for its sprinkling as an entirety. It will also be noted that the city hires a man to see that the work is properly done; and one man is supposed to "inspect" 250 miles of streets—how often? Some comment might be indulged in at this point. San Francisco pays a stated sum for each 1000 lineal feet of street sprinkled, but apparently has no means of determining the quantity of water used. Evidently these two cities are not up to date. But such statistics as could be obtained are herein published. Make what use you please of them.



**The Imperative Mandate.** A Board of Freeholders is at work framing a new charter for the city of Los Angeles. One of the new features which it is proposed to insert in the charter is the right of the electorate to recall an official who fails to properly discharge his duties. The details have not as yet been worked out, but the freeholders appear to be nearly unanimous in their desire to have such a provision. It will strike the thinking citizen as a most excellent idea. It is the introduction of business principles into the government of public affairs. The ordinary business man never appoints an agent or employee without reserving the right of revocating his appointment the moment a dereliction of duty occurs. Somehow the people have been in the habit of selecting agents—public officials—

and giving them authority to do about as they pleased for a term of years, with the only exception that they must not permit themselves to be caught and afterwards convicted of committing a criminal offense. A provision that an official may be voted out of office will be apt to have a restraining effect upon the official. It is liable to prove more effective than the ancient and practically obsolete method of impeachment. It will also operate to make the public officials more amenable to public opinion. It will also have a tendency to make the average citizen more interested in public matters and to watch more closely the conduct of public servants. The operation of the "imperative mandate" in the Los Angeles charter will be watched with interest.



**Two Other Charters.** The voters of the city of Alameda refused to ratify the charter submitted to them by a Board of Freeholders. The chief point of attack was the scheme that gave the Mayor much power in the matter of appointments, and there was a feeling that the charter was not an improvement over the one now in force. As a scheme of municipal government it provided nothing new, for the powers were divided between the mayor, an auditor and the council.

Now comes another proposed charter, that at Pasadena, that contains more objectionable features than did the one defeated at Alameda. In this document the bulk of the political power is in the hands of the Mayor and a Board of Commissioners, appointed by himself, and of which he is a member. These commissioners have control of the police and fire departments, streets and all public institutions that may be acquired, and the only elective body is the council with little power outside of the providing of the revenues of the city. This



plan has not worked in other cities and is not likely to do so in Pasadena. There will always, and very naturally, be a jealousy between the council and commissioners, and effective work will be difficult to accomplish. But a more serious result that can safely be predicted is that the Mayor will never be re-elected and a "green hand" will be the city's manager every two years. By exercising in the power of appointment, the power of vetoing legislation and having the general responsibility of the affairs of the municipality, he will make enough enemies in two years to successfully defeat him at the next election, and this will be especially true if he tries to do his full duty. This assertion cannot be successfully contradicted in the light of the public records of the cities of this country. What would we think of a private corporation that provided in its by-laws that a new general manager should be chosen every two years? We would certainly declare that it was a very unbusiness-like proposition. Yet we virtually require a new business manager of a city every two years where we adopt such a plan as that outlined in the charter referred to. No wonder that we complain of our inefficient municipal governments!



**Some Good Points.** In at least one respect the proposed Pasadena Charter is best of any in the state. The enumeration of powers can scarcely be improved upon. In contrast with other charters in this respect one is struck with the orderly sequence in which the powers are stated and, differing from the organic laws of other cities the powers are given to the municipality as a concrete whole, not enumerated as the powers of the council. The details of the plan of the referendum are also better than any other charter that has thus far been framed.

**The Next Convention.** Some of the members of the Executive Committee have informally discussed the program for the next convention, which will be held in San Francisco, commencing on December 12th. It will probably continue for three days, as much important business is to be transacted. The important work will be the considering of needed legislation. In order to prepare for this work, the Secretary of the League has caused circulars to be sent to every city attorney, requesting that they present their ideas concerning amendments to the laws. Several responses have already come to hand and all will be given due consideration.



A few cities of the state have not yet seen fit to join the League. Some of these are so poverty stricken that the officials feel compelled to economize. Yet it is safe to say that these very cities are the ones which would profit most by being members of the association. They have no business to be poverty stricken, and it is owing to wasteful and unbusiness-like methods that they find themselves in the condition that they are today. The purpose of the League is to instill into the minds of the city officials the necessity for business methods, and by coming in contact with those who have made their city administrations successful will the officials of the poorer cities gain wisdom. It might be truly said that a failure to join the league shows a lack of business sagacity on the part of those refusing.



A short time ago the League's Secretary was requested to furnish information on the subject of licensing telephones. The inquiry was repeated to the editor of *City Government*, and through the kindness of that publication, we give in this number some answers to the questions asked.

## Public Utilities in San Francisco Under the New Charter.

BY CHAS. WESLEY REED, CHAIRMAN OF THE PUBLIC UTILITIES COMMITTEE, SAN FRANCISCO BOARD OF SUPERVISORS.

THE Board of Supervisors of San Francisco is now engaged in investigating the cost of acquiring the various public utilities of the City and County, in obedience to the commands of the New Charter.

Our new organic law is altogether on the side of public ownership of all public utilities and provides the machinery for bringing about such ownership. Article XII of the Charter on the "Acquisition of Public Utilities" opens with these words: "It is hereby declared to be the purpose and intention of the people of the City and County that its public utilities shall be gradually acquired and ultimately owned by the City and County."

The Supervisors are directed, within one year after the charter goes into effect, to procure through the City Engineer, plans and estimates of the actual cost of the original construction and completion by the City and County of water works, gas works, electric light works, steam, water or electric power works, telephone lines, street railroads and such other public utilities as the Supervisors or the people, by petition to the Board, may designate. (Charter Art. XII, Sec. 1).

Hereafter the Supervisors must solicit and consider offers for the sale to the City of existing utilities, in order that the electors shall have the benefit of acquiring the same at the lowest possible cost. (Charter Art. XII, Sec. 2).

When the cost of a public utility can be paid out of the ordinary revenues of the municipality only a majority vote of the people is required to authorize its acquisition. When the cost is so great as to require the issuance of bonds, it requires a two-thirds vote of the people to authorize the acquisition of the proposed public utility. (Charter Art. XII, Sec. 4).

After the plans and estimates have been procured and placed on file by the Supervisors it is made their duty to formulate and submit to the electors of the City and County, propositions for the permanent acquisition and ownership of such public utilities as they may regard "most important to the City and County."

Should the Supervisors refuse to submit such questions to the people, or should they be acting in the interests of the corporations who now own these utilities, it is provided that the people may cause to be submitted to them a proposition for the acquisition of any public utility upon a petition signed by fifteen per centum of the electors voting at the last preceding general election, (Charter Art. XII, Sec. 3).

It may be said at the outset that the Charter's mandate that the plans and estimates shall be filed before January 8, 1901, requires an impossibility. The City Engineer could not make, within that time, plans and estimates of the cost of construction of all these various utilities. Mr. Grunsky is a very accomplished civil engineer, and has an intimate, and at this juncture a very valuable, acquaintance with the available water supplies of the Sierras, but it is no impeachment of either his ability or experience to question if he has the necessary knowledge of, and acquaintance with, gas works, electric light plants, street railroads, telephones and power plants, necessary to carry out the requirements of the New Charter that these plans should be filed within the first year of the operation of the New Charter.

When the present administration took office on the 8th day of last January it was face to face with a deficit of over



\$125,000 which was growing at the rate of \$20,000 a month. Every expense had to be cut down, every economy practiced, and no new expense incurred in order to tide the City in safety over the fiscal year which ended in June. Then over thirty thousand dollars was appropriated in the new tax levy for the investigation of public utilities, and the water question was deemed the most important.

San Francisco is one of the very few cities in the United States which does not own its own water supply. Water is furnished to this municipality by a private corporation—The Spring Valley Water Company. The amount of water used per capita is very small, much less than in any other American City of the first class. In San Francisco every person uses about 75 gallons of water a day, while in New York every person uses 103 gallons per day. In San Francisco, with a population of nearly 350,000 we use 26,000,000 gallons of water a day, while Oakland, with one-fifth of the population uses one-half as much water, and Sacramento, with less than one-tenth of the population, uses more than one-third as much water. The reason for the comparative economical use of water in San Francisco is said to be that our houses are built close together, and as a consequence a very small expanse of lawns and gardens exist to be watered and irrigated. The task of furnishing water to San Francisco with houses built close to one another, and with a small per capita use of water, should be comparatively easy and cheap.

But we find that the cost of water is extraordinarily high, so high that San Francisco stands in a class by itself. Almost exactly \$211 is paid the Spring Valley Co., for every million gallons of water consumed, while in the Eastern Cities it ranges from fifteen to thirty dollars a million gallons. The cost of water in San Francisco is almost exactly fifty cents on every hundred dollars of assessed valuation. People talk in San

Francisco of our dollar limit, our low rates of taxation, and our freedom from debt. The fact is that we have no public utilities at all and we allow the quasi-public corporations to collect their charges from private consumers, which is nothing more than indirect taxation. When the tax rate of San Francisco is compared with Cities that have their own water works, electric light plant, gas works, and possibly telephones, it looks low, but if the cost of supplying the City of San Francisco with water and light were added, our tax rate would be over \$1.75 on the hundred dollars of assessed value; and if we added the cost of our telephone service the rate would be over \$2.00. Few people realize that in San Francisco for every dollar that is raised by taxation almost exactly fifty cents is added for water. This is from seven to fourteen times as much as it costs other Cities in America of an equal greater population.

The Spring Valley Company's officials attribute the costliness of water in San Francisco to climatic and physical conditions. San Francisco is not near any stream or lake of sufficient size to furnish water to its inhabitants and a system of catch-basin reservoirs with small streams flowing into them has been adopted.

Pilarcitos, San Andreas, and Crystal Springs reservoirs, with small, insignificant creeks running into them, furnish about 15 to 20 million gallons a day. They are situated in the hills of San Mateo County, from fifteen to twenty-five miles from the City, and depend almost exclusively upon the seasonal rainfall for replenishing their supply of water. The long, dry California summers cause an immense amount of evaporation, and the four years of practical drouth through which we have just passed, has reduced the volume of water in these reservoirs to such a degree that San Francisco is face to face with a scarcity of water supply, which will become a famine in case we expe-

rience a fifth year of limited rainfall. Lake Merced, within the limits of the City and County, is fed by subterranean springs and has a capacity of about three million gallons of water a day. From Alameda Creek the water is brought across the bay by means of a submarine pipe having a capacity of eight million gallons a day. In winter this supply cannot be used when the water is muddy, and in summer the flow of Alameda Creek diminishes to a point where barely three million gallons a day are furnished.

Over thirty years ago Col. Mendell, then a United States Engineer and now President of San Francisco's Board of Public Works, estimated that the Spring Valley Water System would not constitute a safe supply unless it could store a thousand days supply of water, sufficient for the needs of San Francisco. At that time nobody expected a continuous three years of limited rainfall, and Colonel Mendell was scoffed at. The years have justified Col. Mendell, however, and Mr. Schussler, who is the accomplished Chief Engineer of the Spring Valley Company, assured the Supervisors in February that unless heavy and continued rains would fall during the season that was then coming to an end, a four years' instead of a three years supply would be necessary before the city could feel safe. Needless to say the rains have not fallen and San Francisco is not now safe from a water famine, according to Mr. Schussler. Mr. Schussler was using this argument in order to justify the heavy expenditures of money in the Sunol Valley which were and are being made for the purpose of enlarging the capacity of Alameda Creek, and also to explain the reason for the heavy operating expenses of the company during the dry years, which caused more pumping. As the water in the reservoirs, which runs to the City by gravity, lowered, it was necessary to rely more and more upon pumping from Alameda Creek and Lake Merced.

The Supervisors of San Francisco find that the cost of supplying water by the Spring Valley company is from seven to fourteen times as great as other cities have to pay; they find that the Spring Valley Water Company has extended its system, bit by bit as the City has grown, so that it has been called a "patchwork" system; they find that the Spring Valley Water Company claims to have spent \$32,000,000 in providing San Francisco with its water supply; they find that the Engineering work done by the Spring Valley is, according to their own engineering advisors, of the first grade; they find that while the population of the City has been steadily growing the past four years, the capacity of the Spring Valley system has been steadily decreasing until now an actual scarcity of water faces the City. They find that all the sources of water near San Francisco are owned by the Spring Valley Water Company, which has had the forethought to gather them in long ago. Under these conditions they are forced to place a price upon the works of the Spring Valley Water Company's system, and also to estimate the cost of bringing water to San Francisco from all other available sources, so that any one of these supplies can be submitted to the people to purchase. Here is work of the highest order, and of the greatest responsibility.

As far as the Spring Valley Water Company is concerned the Supervisors are compelled to put a price upon it in order to fix water rates next February, and also to decide whether it is best to buy that Company's system or go to the Sierras.

Those who do not favor the Spring Valley system allege that it is a patchwork system, enlarging with the City's needs, and that a great deal of the early works have been abandoned, although the City still pays taxes thereon. If the system were to be built new and as a whole it is claimed that it would cost much less than \$32,000,000. It is said that the Spring Valley's system is inad-



equate to the growing needs of the city—that soon a supply from the mountains must be procured anyhow—and that many times as much water as Spring Valley furnishes can be procured for less money than has been put into the Spring Valley Company's system. Finally, it is said that Spring Valley water at its best is not excellent, and at its worst, in the Autumn, it is quite bad and helps to spread such diseases as typhoid fever. Therefore a supply of water from the high Sierras, free from contamination, is a necessity for the future needs of San Francisco because of the increased use of water attending the natural growth of population, and is a necessity for the present needs of San Francisco, because the health of the people will thereby be improved.

On the other hand, the Spring Valley partisans assert that that company has all the natural supplies of water adjacent to San Francisco; that that system has been adapted by long use and gradual development to the needs of the City as no other could be; that the engineering department is of the highest grade and that the pumps, dams and other portions of the Spring Valley works are models for similar institutions in other parts of the world; that Spring Valley is in no wise responsible for the isolation of San Francisco from any large stream of living water, and that the great cost of water here is a result of extraordinary physical conditions; that \$32,000,000 has actually been expended on Spring Valley development, and under the decisions of the Courts it is entitled to a reasonable return on the amount invested; that the system has been constructed and is run with the greatest efficiency and economy consistent with the highest grade of construction and service; in a word, that all things being considered, the Spring Valley Water Company's system is the ideal system for San Francisco.

They also claim that it will cost many more millions of dollars to bring a supply from the Sierras, but admit that if

such a supply could be brought from the Sierras cheaper than \$26,000,000 (upon which the Spring Valley Co. is allowed interest) that the corporation's system is over valued.

Inasmuch as there is, with the possible exception of artesian wells, no supply available except in the Sierras, it would seem as if the only way of getting at the value of the Water Company's property is by estimating the cost of bringing the supply from the mountains. The local company has a monopoly. Its officers long ago bought up all the water bearing properties around the bay, and the corporation is entitled to charge whatever any other monopoly which controls a life necessity and fears no rival, could charge.

This view of the case makes it imperative for the city to secure accurate plans and estimates of the cost of obtaining a supply from the Sierras. Col. Von Schmidt affirms that such a supply can be brought to San Francisco for \$17,000,000, while Mr. Schussler says it will cost nearer \$40,000,000.

We have three parties of surveyors now in the field, and expect to have accurate surveys of a proposed pipe line from the north fork of the Yuba river, from the American river, and from Lake Tahoe within a short time, as well as the cost of dams, canals and adverse water rights, before the first of February, when the Board of Supervisors must fix the water rate for the ensuing year.

The Stanislaus and Tuolumne River, and the Blue Lake system are available supplies, but the Lake system has been appropriated for the development of electricity.

The two river systems take their rise in the high Sierras where the granite formation affords little chance for man's habitation, and the National Government has set the entire region aside as a forest reserve. No contamination of the water by villages, or by bands of sheep or cattle is possible, which makes these sources very attractive. More-

over they are directly east of San Francisco and a much shorter line than from Lake Tahoe would suffice. The cost of the iron or steel pipe line necessary to bring the water across the floor of the great valley lying between the Sierras and the Coast Range is the principal cost of construction, and whatever lessens that item is of the greatest importance.

Another factor which will enter into the cost of bringing water from the Sierras is the development of electricity by water power. The eternal snows of the Sierras furnish a never failing supply of water. It runs to waste under the influence of the summer sun too fast to furnish the steady flow necessary for the development of a given quantity of electricity unless storage reservoirs are used. The Blue Lakes system is made up of storage reservoirs. At the head waters of the American, Stanislaus and particularly the Tuolumne Rivers, are sites for reservoirs and of course an unlimited quantity of water. From data already collected, but not, as yet sufficiently verified, from twenty to fifty thousand horse power of electricity can be developed in several of these available supplies. If the city should get its water from one of these sources, the interest on the bonds could be paid, if not wholly, certainly in large part, from the sale of electricity for mining, pumping and manufacturing purposes. The greatest benefactor to California is he who furnishes cheap power for manufacturing purposes so that our citizens can compete with those countries more favorably located in respect to coal.

San Francisco furnishes a large market for electricity in its public lighting. If its citizens decide on a policy of public ownership, and in the words of the charter its public utilities are "ultimately owned" by the City, the result of taking water from the Sierras would be far reaching indeed. Besides furnishing an abundance of the purest water for the people, in itself the greatest imaginable blessing, an enormous amount

of electricity will be developed, sufficient to light all of our streets and public buildings, run all the street railroads, furnish all the power necessary for elevators, sewage pumps, and pumps to lift water to higher levels, and incidentally have a good deal left to sell to users of power in San Francisco as well as in other localities. Besides this a great deal of surplus water will, or can be stored, which could be used for irrigation purposes. The large and permanent reservoirs necessary for our water supply would furnish the water for the development of electricity without additional cost, while the avidity with which all electricity is taken up shows but too plainly how much our people need cheap power.

We hope and expect to have our engineers report on the various available water supplies before next February, and that they will file plans and estimates of the cost of construction of water works and electric light plants, which will take these questions from the realm of conjecture and place them on the hard ground of ascertained facts.

In the mean time there is more or less argument being made for and against public ownership in general.

As an example of how municipal ownership pays I will cite the comparison of most of the electric plants in the United States under municipal and under private ownership, after allowing all the legitimate charges of every kind. This comparison was made by the National League of American Municipalities and has stood the fire of criticism. Under municipal ownership the price of arc lamps is 21-100 cents per hour. Under private ownership the cost of arc lamps per hour is 281-100. Municipal ownership is almost exactly 13 per cent. better than private ownership. This, of course, is an average made up of all the electrical plants in the United States, and includes the most unsuccessful as well as the most successful examples of municipal ownership. To my mind it is an unanswerable argument against the statement



that as a rule municipal ownership of public utilities is more costly than private ownership.

The most recent as well as the most valuable contribution to the literature of this subject is "The Water Supply of New York City," compiled by the Merchants' Association of New York. A private company, called the Ramapo Water Company had entered into a contract to supply the City of New York for forty years with 200,000,000 gallons of water daily at a cost of \$70.00 a million gallons. After the partial consumation of this contract the merchants of New York induced the public officials to delay action until an investigation might be made. Their report is made by the best engineers of the United States and is the most authoritative document of the kind ever published.

They find that during the sixty-seven years from January 1st, 1832, to December 31, 1898, the City of New York made a capital investment of \$86,359,562.09 for the construction of water works. It expended during that time for interest charges, maintenance and operation, \$66,544,245.38; the aggregate earnings were \$88,017,329.72; the total net profits were \$21,473,084.34. During that time the cost of water was decreased from \$54.20 per million gallons in 1849 to \$29.07 in 1898. The report goes on to show that under the proposed private contract with the Ramapo Water Company the City would lose more than \$50.00 a million gallons for forty years, involving a final loss by the acceptance of the Ramapo contract of \$195,460,070.87. When one realizes that this has been under Tammany rule, popularly supposed to be extravagant and wasteful, it is the strongest and most unanswerable argument for public ownership yet produced. Compare that with our own system, where we pay \$211 for a million gallons of water, and all the profit is made by a private corporation.

There has been a steady trend towards municipal ownership in the United

States. I find this language used by the Merchants of New York on that subject:

"Moreover, the experience of other municipalities in the United States, as well as in other countries, show an almost continuous tendency to substitute publicly owned water systems for private, a tendency so persistent and universal, and of such constantly increasing force, that the wisdom in the public interest, of the policy of municipal ownership and control of water would seem established by abundant experience.

"In 1800 there were sixteen plants in operation in the United States, of which fifteen were private and one public. Since that time fourteen of the fifteen have become public.

"At the close of 1896 there were in the United States 3196 water works; of these 1,690 were under public control, 1,489 under private control, twelve were under joint control, and of five the ownership was unknown. In other words, in 1800, 6.3 per cent. were public, 93.7 per cent. were private; in 1896 53.2 per cent. were public, 46.8 per cent. private. Similar conditions prevail abroad, notably in Great Britain. In London a strong movement is on foot to replace with a public service the inadequate and unsatisfactory supply of the private companies which have become enormously wealthy from their monopolies in the various parts of the municipality.

"The cost of the private plants throughout the United States and Canada (excluding the Pacific Coast, where special circumstances render the comparison unfair) is slightly less—some  $3\frac{1}{2}$  per cent.—than the public. This slight increased cost of public over private may be due to the care taken by municipal authorities to keep the sources unpolluted; in other words to the cost of lands bordering on streams and ponds, as in the case of our Croton system. But, on the other hand, the cost to the consumer is almost always less under private ownership. The

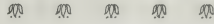
"average cost per family throughout the United States is, for public, \$21.55; for private, \$30.82; that is, privately supplied water costs about forty per cent. more than that supplied by the municipalities."

What will the opponents of public ownership say to these facts, vouched for by the Merchants of New York in opposition to private ownership advocated by the politicians of New York?

Public ownership of public utilities is coming in San Francisco. We must be careful to be conservative in our estimates and in our plans, but the experience in other cities abundantly justifies the popular demand in this city for public ownership. It will take corporations that now debase our standard of public morality out of our political affairs, confer great blessings on the people in the way of cheaper and better

service of the necessities of life, and stimulate the healthiest interests on the part of our citizens in public affairs.

But even at Spring Valley's own figures it would pay the city to buy the works. Spring Valley makes a profit of \$1,300,000 a year out of the city. The city can borrow money at three per cent. or two per cent. cheaper than the Spring Valley can. This will be a saving of \$520,000 a year. The city will save the taxes in San Francisco, which amounts to about \$180,000 a year. Under Civil Service the city can operate the water works as well as the Spring Valley Water Company's officials. We would thus save at least \$700,000 a year which, with the interest to be allowed, will in forty years be much more than the entire cost of the Spring Valley Water Company's system at its own valuation.



## SEWAGE PURIFICATION.

BY E. A. HERMANN SEWER COMMISSIONER OF ST. LOUIS.

[A paper read at the Annual Meeting of the Society of Municipal Improvements at Milwaukee August 28-31.

**I**N all countries streams are used as open sewers until increasing population produces pollution to a point of intolerable foulness. Sewage purification must then be resorted to.

Inland towns and cities (especially those situated on small streams) suffer sooner than towns and cities located on the sea-coast or on the banks of the larger rivers. Many of our smaller cities are now obliged to purify their sewage; some of the larger cities will soon find it necessary to follow their example, especially those located on streams or lakes used as sources of water supply by themselves or by other cities. In due course of time every inland town and city and most of those situated on the bays of our seacoast will be obliged to purify their sewage. This is a work of generations which will be accomplished in each particular locality only when necessity compels action.

Posterity will do most of the work. We can, however, greatly assist those who come after us by keeping in view the ultimate necessity of sewage purification and shaping our course accordingly. All future sewer construction work should be designed so that the work done now can be adapted with few or no changes to the future purification plant when its construction becomes a necessity; so far at least as we are now able to foresee, in the light of present knowledge and experience, what the requirements of such a plant may be.

The outflow of the ordinary sewer is not a thick mass of filth slime, as many imagine; it is mostly water. One thousand parts of the average sewer contain 998 parts of water, one part of organic and one part of mineral matter. The organic matter only is subject to putrefactive decay, and its removal without



danger of offense to the community is the object sought by all sewage purification systems. These systems may be roughly classed under two heads:

I. Sterilization, sedimentation and chemical precipitation.

II. Bacteriological decomposition.

Of these systems only those under the later heading fulfill the requirements of sanitary sewage disposal; the rapid resolution of organic matter into harmless elements or new combinations of elements forming harmless compounds.

The systems under the first heading provide only for a partial sewage purification, mainly for its immediate removal from sight and smell, postponing its decomposition to a later day and to another place.

Taking up the systems of sewage purification noted under the first heading, there are:—

1. Sterilization, which is merely a method of disinfection by antiseptic chemicals applied to flowing sewage before it is discharged into a natural water course. The offensive odor of decaying organic matter, as well as some of this matter itself, and most or all of the microbe life-producing putrefactive decay are thereby destroyed, but as soon as the sterilized sewage is discharged into the water course the antiseptic is diluted or evaporated and loses its power of sterilization; the remaining organic matter soon becomes inoculated with new germs of decomposition and the work of putrefactive decay begins.

2. Sedimentation provides for the settling of the heavier particles in sewage in large tanks or basins, the skimming off (and removal) of the lighter particles which float on the surface and the discharge of the partially clarified (but not purified) water into some natural water course. This clarified water contains large quantities of organic matter in solution, a most favorable condition for the beginning of putrefactive decay. This process is a good begin-

ning toward sewage purification, but is utterly worthless as a purification system if stopped at this stage.

Sterilization and sedimentation are used only for small towns and large private residences, schools, convents, etc. They are incomplete and unsatisfactory methods of sanitary sewage disposal and plants of this kind should be abandoned for better methods.

3. Chemical precipitation is a process of sedimentation combined with coagulation; it is produced by the application of chemicals (copperas and milk of lime are most generally used) to the flowing sewage as it is discharged into large settling tanks or basins. The precipitate (called sludge) is a heavy mass of slime, while the water above it is comparatively clear and much less polluted than before application of the chemicals. After standing some hours the water is strained off, or, in some large tanks, it passes off continuously over a weir; the latter class of tanks are made long enough to permit complete precipitation, while the sewage flows through them at a very slow rate. The effluent water is discharged into a stream, and at some plants it is further purified by intermittent filtration, a method of sewage purification which will be described in detail further on. The tanks are cleaned at intervals; the sludge is pumped out and buried, hauled to farms to be used as a fertilizer, dumped at sea, or compressed into cakes by hydraulic presses and then buried or ground up for use as a fertilizer.

The expense of hauling sludge to farms or preparing it for use as a fertilizer is more than it is worth for that purpose. It is much cheaper to waste it by burial in long rows of ditches or dumping at sea, than to attempt to utilize it for farming purposes.

Chemical precipitation has long been in use in London, Birmingham, Glasgow and other large cities in England and Scotland; also in Worcester, Mass., and a few smaller cities in the Eastern states.

London operates a fleet of six large steamers to carry sludge from its precipitation tanks to the sea, where it is dumped in deep water.

The large expense for chemicals, labor for operating precipitation tanks, transportation of the sludge, etc., combine to make this system of partial sewage purification a very costly one. It was believed, at one time, that the sludge for agricultural purposes would partly or wholly balance this expense, but this view is not confirmed by experience. The system has not proven a satisfactory one, and it is not likely that any new plants of this kind will be erected.

The systems of sewage purification which modern sanitary science points out as embodying the correct principles are those which guide and direct the decay of organic matter by means of bacteriological decomposition. The organic matter in sewage is of both animal and vegetable origin; it consists mostly of grease, oil, excrement, urine, paper, soap, and fragments of meats and vegetables. These are the putrescible constituents of sewage whose decomposition becomes dangerous to life and health.

All organic matter, both animal and vegetable, is subject to putrefactive decay; this decay may be prevented for a time by artificial means, but the moment the effect of such means ceases decomposition begins; it is a necessary process of nature which can not be permanently arrested. The substances which have served the purposes of animal and vegetable organisms begin to decay as soon as life is extinct; they are resolved into elements or combinations of elements into new forms, which may be consumed as food by plants and animals, and thus again become useful in the economy of nature. The nature of this decomposition is not yet clearly understood; it is known, however, that it is brought about by micro-organisms, generally called bacteria, of many different kinds requiring different condi-

tions for their life and development, different foods, and yielding different products by their work. The manner in which these minute scavengers operate is not yet known; it is believed, however, that they break up the complex organic wastes in sewage by removing one or more atoms of a compound, thereby withdrawing the support on which the structure of the compound depends, just as a card house depends on the support of one or more of the lower cards and is broken up if such cards are withdrawn. The result is the decomposition of the putrescible organic matter into the gaseous and mineral constituents, thus changing it into forms which are not harmful to the public health or obnoxious to sight or smell.

The bacteria which cause decomposition of organic waste may be divided into two principal classes, aerobic and anaerobic; the former depending on an ample supply of air for their life and development, and the latter flourishing only in the absence of air. The former are the bacteria of oxidation (burning), the latter are the bacteria of putrefaction. Aerobic bacteria develop most advantageously in organic matter when it is finely divided (as in solution in water) and spread over and around porous soils or sands, where each grain of soil or sand is enveloped by a thin layer of the waste water, and this in turn surrounded by air. Under such conditions aerobic bacteria develop in enormous numbers in an incredibly short space of time, and quickly oxidize the noxious organic matter. An ample supply of air must be provided for these bacteria; the sewage water can not, therefore, be in continual contact with the grains of soil or sand; it must be brought on at intervals, alternating with supplies of air drawn over the surface or through the layer of soil or sand. Anaerobic bacteria develop in the absence of air; their work is done within the body of the sewage water, and consists in breaking up the organic wastes in such manner that they are liquified



or taken up in solution by the water, and thus prepared for oxidation by aerobic bacteria at a later stage of the process of decomposition.

Which one of these processes of decomposition (or in what order) shall take place without creating a nuisance or injuring the life and health of the community can be readily determined by suitable devices and by proper regulation and supervision. This is the object of all methods of sewage purification by bacteriological decomposition, which attempt to guide the forces of nature by artificial devices to perform the work desired by man; and these methods may be divided into the following classes:

1. Broad irrigation (sewage farms).
2. Intermittent filtration.
3. The septic tank.

1. Broad irrigation is the oldest and simplest method of sewage purification. It aims to utilize the sewage as a fertilizer by allowing it to run over fields planted in grasses, grains or vegetables, where it serves as food and drink to the growing crops. Sandy soils are best adapted to this method of sewage disposal. Part of the water in the sewage is absorbed by the vegetation and the balance filters through the soil and is carried away purified in the ground water, or it is discharged into a natural water course by means of open-jointed sub-soil drain pipes laid for this purpose. The organic matter in sewage is decomposed and converted into plant food; thus a rearrangement of elements is brought about, forming new combinations beneficial to the uses of man.

It is essential, of course, that the crops receive no more sewage than is necessary for their proper nourishment; drowning the crops by an excess of sewage must be avoided. The fields must therefore be separated from each other by low dykes, and the sewage turned on intermittently to the various fields, at intervals of days and weeks, as the requirements of their crops may necessitate; they must not receive any

sewage during harvest time and very little when it rains; at such times the sewage must be wasted on arid fields. This requires a very large area of land for the disposal of the sewage, at least one acre for each 250 inhabitants; the system is therefore best adapted to small towns and isolated public institutions such as prisons, hospitals, asylums, etc., where the necessary land can be obtained at moderate prices and within short distances of the towns or institutions. The system is impracticable for nearly all large cities, mainly on account of the enormous quantity of land required and its great cost. Many isolated institutions, towns and small cities in England, France, Germany, and in our Eastern States are using this system; a part of the sewage of Paris, France, is also treated by broad irrigation. The only large city using this method for disposing of all of its sewage is Berlin, Germany; the sandy soil in its vicinity is peculiarly adapted to this purpose. The city owns 28,000 acres of land and at present uses one-half of it (an area nearly five miles square and almost equal to the area of Berlin) for the purpose of a sewage farm. This farm cost \$10,000,000, the annual operating expenses are \$550,000, and the receipts from farm products are \$600,000, leaving an apparent profit of \$50,000; but the interest on the capital invested is not included in the expenses; when this is done a large deficit appears.

It had been fondly hoped, at one time, that sewage farming (which returns to the soil what has been taken from it) would yield a money profit; these hopes have not been realized. No sewage farm has proven to be a profitable income-bearing investment, but its value to the community can not be based strictly on direct money profits; indirect benefits to the public may be worth more than actual money profits.

2. Intermittent filtration is the second step in the development of the problem of sewage purification. Experience had shown that sewage can be purified by

allowing it to filter through natural soils, and that it can be utilized as a fertilizer in this process; but the value of the fertilizer is so small in comparison to the great cost of its utilization (mostly due to the great cost of the large areas of land needed) that it is not true economy to attempt to save it. A very much smaller area of land will purify the same quantity of sewage if artificial filter beds of sand or cinders are prepared and the sewage allowed to filter through them at regular intervals, varying with the strength of the sewage, in periods of twelve to twenty-four hours. The filter beds are composed of coarse sand, coke, charcoal, cinders or similar material from four to six feet thick, underlaid by rows of open jointed drain tiles connecting with a large central effluent pipe leading to a natural water source. The filter beds are from one to three acres in area, and separated from each other by earth embankments or masonry walls.

The operation of the process is as follows: Sewage is allowed to flow over a filter bed until it is about one inch deep on the surface of the filtering material; the sewage is then shut off and turned onto the second bed, and when this is full, to the next bed, etc. The sewage slowly sinks through the porous material of the filter bed and the water it contained is discharged through the effluent pipe into some natural water course. After draining and resting for a short time (generally from twelve to eighteen hours), sewage is again turned on the beds and the operation is repeated. This can be done indefinitely without clogging the filter bed or imparting an offensive odor to the porous material of which it is made up. Intermittent filters have been operated continuously for ten years without the slightest indication of clogging or foulness of the filtering material. In the course of its passage through the filter beds from 90 to 99 per cent. of the organic matter (and also of the bacterial life) disappears; what becomes of all

the organic filth which has been poured onto the filter beds, is not plain. It is believed, however, that it has been decomposed and oxidized, as previously explained in describing the work done by the aerobic bacteria. These bacteria can thrive only when there is a plentiful supply of air, and it follows, therefore, that sewage can be poured onto these filter beds only at intervals, with periods of rest in between, allowing thorough aeration of the full thickness of the filter bed of sand or other porous material. For this intermittent action in the supply of sewage to filter beds the name "intermittent filtration" has been derived. It has been observed that one acre of such filter will purify 50,000 gallons of sewage in winter and 100,000 gallons in summer.

The total area of filter beds required for a large city is therefore greater than can practicably be obtained by many cities. Efforts to reduce this area required to purify sewage led to experiments which resulted in the third method of sewage purification by bacteriological decomposition.

3. The septic tank is merely an artificial rotting chamber; an elongated tank or basin (either open or covered, though generally covered) through which the sewage is allowed to flow at a very slow rate of speed, the effluent water passing over a weir and then through intermittent filter beds. While the sewage is thus slowly passing through the tank the heavier particles of organic matter sink to the bottom; The former (being under water where air is excluded, is immediately attacked by anaerobic bacteria, which rapidly multiply to countless millions and quickly break up the organic matter into its gaseous and mineral constituents. The latter sink to the bottom of the tank, the former rise to the surface of the water and pass off into the atmosphere. The amount of the deposit of mineral matter is not nearly so large as the sludge formed by chemical precipitation and is more easily disposed of by pumping or carting.



Two or more septic tanks are built for every purification plant, one tank then to be cleaned while the other or others are in use. The effluent water from the septic tank contains a large quantity of organic matter in solution; and this water is passed through an intermittent filter for further purification; in fact, the septic tank method of purification is really only a method of preparing sewage for intermittent filtration by liquification of most of its organic matter; it is not a complete system in itself. It must be operated in connection with an intermittent filter for complete purification of the sewage. About 700,000 gallons of sewage per day can be purified by means of the septic tank and intermittent filtration system. This system requires far less space than any other system of sewage purification, and is much cheaper to operate; in fact, it is almost automatic in its operation. The care it does require, however, is of the skilled and intelligent kind, and, like the working of a locomotive, none but skillful and experienced men should be entrusted with its operation. This system of sewage purification has been used in nearly all plants built within the last few years in both large and small cities in this country and in Europe. Manchester, England, a city of 600,000 people, is the largest city which now uses this system.

Partial decomposition of organic wastes in the septic tank followed by complete decomposition in the intermittent filter is the result obtained by many years of experiment and trial in the efforts to purify sewage; it represents the latest accomplishment of sanitary science, and while still somewhat in the experimental stage, the results obtained indicate that the methods of this system is in line of progress which will probably insure the cheapest and most efficient manner of sewage purification.



The next Annual Convention of the League of California Municipalities will be held in San Francisco on December 12, 13 and 14, 1900.

## Cost of Street Sprinkling in Certain Cities.

The Bureau of Information recently had occasion to gather data on the cost of street sprinkling in the principal cities of the state. Being of general interest the same is here reproduced.

### OAKLAND.

Total miles of street sprinkled, 150.

Cost of water last year, \$19,403.17.

Cost of labor last year, \$15,384.00.

Number of days streets were sprinkled, 165.

The city hires the sprinkling done at the rate of \$4.00 per day, the persons doing the work furnishing teams, wagons and all incidentals. The city pays for the water.

From 20 to 35 wagons are employed in the summer time.

### SACRAMENTO.

In making an estimate for sprinkling in the tax levy we place enough so we can raise at least \$15,000 and we spend it all. We let Contracts for 6 months and the balance of the time we hire teams by the day. The city owns her own water plant and we do not figure on the cost of water used for sprinkling, though of course it requires more fuel to keep up the pressure during the contract season.

We own 22 wagons equipped with Winker and Studebaker outlets. They are of 800 gallons capacity. We furnish these wagons to the contractors and as they are all overhauled in the spring we expect them to be kept intact at the expense of the contractors. We sprinkle the bituminized streets (a little over 4 miles) with two wagons, the team and driver at \$3.50 per day. We have streets and alleys to the extent of say 150 miles which are sprinkled by contract for six months at a total cost of \$10,228.00. We endeavor to make the contractors keep the dust down and if once a day answers the purpose well and good, but it requires four times a day on some streets. We can safely say all the streets are wet twice every

The Electric R. R. Co. have contracted to sprinkle all streets (except bituminized) on which they have amounted to 10 miles, for six months or 75 cts. per mile per month. Some contractors are as low as 10 cts. per mile per day but I am satisfied they are not keeping even and are a continual source of annoyance. The R. R. Co. have a car on the road and are using it every day, by which they are able to do the work. It consists of a tank of 2500 gals., equipped with a pump and force pump worked by a separate motor from the one used for the lighting. The idea of the pump is to pump the water out when there is not sufficient gravity to throw a spray over the width of the streets. I am anxious to see how it will work as they have some trouble in loading and are afraid they will often detain some of our trolley cars.

We are doing some portions of the sprinkling at night—those portions that are not protected by shade of any description—and we find the evaporation is not so rapid and one inundation at night is worth two by sunlight. I will state that we expend about \$1,500.00 per year out of our \$15,000.00 for repairs and painting of our 22 wagons. During the last 6 months that the streets are not sprinkled by contract we pay \$3.50 per day for man and two horses, we furnish the wagons and keeping in repair.

JOHN STEVENS,

St. Supt. of Sacramento.

SAN FRANCISCO.

Contracts for the entire work of sprinkling at the rate of 26½ cents per 1000 lineal feet for each time sprinkled. Contractor furnishes everything.

This is the first year the city has done any sprinkling and the contract has just commenced.

ALAMEDA.

Miles of sprinkled streets, Fifty.

Miles sprinkled once each day, Fifty.

" " twice each day, About

Twenty.

Total cost for water last year, \$2,989.71.

" " " labor " " \$2,744.55.

Streets were sprinkled last year from April 1, to October 30.

City does not contract for sprinkling.

City owns its own sprinklers and hires drivers and teams.

Wages for drivers and teams 30 cts. per hour, V. M. FRODDEN,

St. Supt. of Alameda.

STOCKTON.

Miles of sprinkled streets, 41.

Miles sprinkled once each day, 7.

" " twice each day, 31.

" " three times each day, 3.

Total cost for water last year, \$1729.71.

" " " labor " " \$6590.79.

" " " incidentals last year,

\$1285.89.

Streets were sprinkled 170 days last year.

City does not contract for sprinkling.

City owns its own sprinklers and hires drivers and teams.

Wages for drivers and teams, \$3.00 per day. R. R. REIBENSTEIN,

St. Supt. of Stock sn.

FRESNO.

Miles of sprinkled streets, About 19.

Sometimes sprinkled once each day.

Generally sprinkled twice each day.

Sometimes sprinkled three times each day.

Total cost for water last year, \$2,148.

" " " labor " " \$3,189.

" " " incidentals last year,

including reconstruction of four wooden wagons and new tank fittings.

Streets were sprinkled 146 days last year.

City owns its own sprinklers and hires drivers and teams.

In 1898 contract price was \$2.13, which carried until June 1899, when contract was let for \$1.97 per day for team and driver and repairs of wagon. The last contract was continued until July 1900. The city is now paying \$2.50 for team and drivers per day of twelve hours work on streets (no contract). Results more satisfactory.

M. BILBY,

St. Supt. of Fresno.



## LOS ANGELES.

We have about 250 miles of sprinkled streets which is let by public contract at a cost to the city of \$49,600.00 per year during life of contract. The contractor to furnish all tools and labor and sprinkle all graded and gravel streets as often as necessary to keep in condition, and the City pays an Inspector \$90.00 per month to see that the work is properly done. The contractor owns his teams and pays his men \$20 per month and board.

J. H. DRAIN,

St. Supt. of Los Angeles.

## PASADENA.

Miles of sprinkled streets.....	60
Miles sprinkled once each day.....	15
"    "    twice    "    "    .....	25
"    "    three    "    "    .....	5
"    "    four times a week.....	15
Total cost for water last year...	\$3,138.69
"    "    "    labor    "    "    .....	6,309.30
"    "    "    incidentals    "    .....	212.50

No. days streets were sprinkled

last year.....277

City contracts for sprinkling per day, for a term of 3 years.

City does not own its own sprinklers.

Rate of wages per day for drivers, sprinklers and teams, \$2.40 in 1899, \$2.24 in 1900. Respectfully,

J. A. BUCHANAN,

St. Supt. of Pasadena.

## SAN JOSE.

Number of miles of sprinkled streets, about 75.

Miles sprinkled once each day, about 25.

Miles sprinkled twice each day, about 50.

Total cost for water last year, about \$4,000.00.

Total cost for labor last year, about \$6,000.00.

Total cost for incidentals last year, about \$1,000.

The City does not contract for sprinklers but owns its sprinklers and hires drivers and teams, paying therefor \$65 a month.

R. M. GARRETT,

Street Supt.

## Curiosities of Municipal Ownership.

*The Municipal World.*

It is not an uncommon thing circumstance to-day to find municipalities owning and operating a waterworks plant, a gas works, or an electric light plant. It will be a matter of much interest if, as seems not improbable, the city of St. Thomas will own and operate its own electric railway.

In England and Scotland all of these concerns are frequently controlled by municipal councils, yet in that country there are to be found some curiosities of municipal ownership. Doncaster, the famous St. Leger town, owns the race course, from which it derives a revenue of about £10,000 a year. Lincoln, Chester and Ayr, are owners of similar but less profitable race tracks.

One corporation only, that of Saltash, owns its own parish church, from which, however, a revenue is not derived, to lessen the tax-rate as is the case with the race course to which reference has been made.

Plymouth owns a theatre, a very paying property. Birkenhead owns the famous line of ferries between that city and Liverpool, comprising a fleet of ten steamers. The profits now amount to about £12,000 yearly.

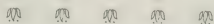
Cookery classes are not unusual, but Bristol has a cookery school amongst its possessions. It costs £300 annually, but the citizens regard it as a very wise expenditure. Nottingham is the only municipality in the United Kingdom which owns its own university. Macclesfield and the Yorkshire town of Halifax own stone quarries. A town in Wales, Pwllhili, anxious to shine as a summer resort, successfully conducts its own tourist agency.

Only two of the many castles which dot the British Isles are owned by municipalities, these being Norwich and Conway. That at Norwich has been converted into one of the finest museums in the country. Very few art galleries are a source of profit, but every

year Liverpool gives an exhibition in the Walker Art Gallery, the receipts from which vary from £3,000 to £4,000 each year.

Ontario is too young to yet have many departures of this kind, but enterprise

is strong and the idea of municipal ownership is growing in favor, so that at an early day we may expect to find many towns earning an honest penny from various sources.



## PUBLIC PLAYGROUNDS.

BY MISS SADIE AMERICAN, IN MERCHANTS REVIEW.

SOME years ago there was imported into the Eastern States from California, I think from San Francisco, an expression which in its way marked an epoch—the expression “hoodlum.” It awakened curiosity, and when it was found to describe a certain type of youth better known for his powers of annoying his neighbors than for his good citizenship, it awakened the interest of thoughtful men and women. The genus was found to exist and thrive in other places. Investigation brought out the astounding fact that juvenile crime seemed to be increasing, but analysis proved that what was called crime on the part of the boy was often in reality the crime of ignorance, neglect or worse on the part of the men and city which stigmatized him as a criminal, arrested him and placed him in the hands of the police instead of putting him under the surveillance of one who could show him how to entertain himself in ways less destructive to the neighbor's comfort or property and to his own moral destruction.

For it has been conclusively proven that these so-called criminal acts are almost entirely the result of undirected energy, to say misdirected would put too much responsibility on the boy. It becomes destructive in its tendency instead of constructive, and only needs guidance to become a source of good instead of evil. Nature also endows every normal youth with a fund of energy and spirits which must express itself, often demands expression in muscular action, and if it finds no outlet it explodes like any other force, as

steam. Nature also endows the youth with vivid imagination which must be fed or it seeks its own feeding ground, and having little discrimination chooses poison often instead of food.

The public playground has been found to serve as the best means to upset these evils and to turn the “hoodlum” into a self-respecting and respected citizen, because it furnishes a healthy and legitimate outlet for the normal energies. Even in a city with so many gardens as San Francisco there is little or no place to play, especially for the thousands coming from working homes. Though there may be no tenements, a man occupies no more rooms than will house his family, and there is no place for quiet play for the youngster nor the youth, and certainly no space for those games which require energetic motion. The open spaces are small and not adapted to sports of any kind. Golden Gate Park is too far away for the majority.

The youth, therefore, have no recourse but the street. Older communities have discovered that the lack of proper playgrounds is a source of great expense and waste to the community, expense which runs the cost of the police system, including all penal and reformatory institutions, into millions, and waste of the energy and power which should go to making staunch citizens instead of strong criminals. In the report (1897) of the committee on small parks of New York of which Mr. Abram S. Hewitt was chairman, he says: “Improvements of property have left children no other opportunity for play than those that



can be found in the streets. It is impossible to use these for games without incurring the interference of the police. A sense of hostility between the children and the guardians of public order is thus engendered, leading to the education of citizens who become enemies of law and order. . . . With a common accord the precinct captains attribute juvenile rowdiness and turbulence to the lack of a better playground than the streets." Again, "traffic of train and car cause many accidents to life and limb. . . . London, after an experience of forty years battling with the slums, says tersely: Crime in our large cities is to a great extent simply a question of athletics."

So New York proceeded to create small parks and playgrounds and has spent and is spending millions to undo what lack of foresight and commercial greed has done, and occupy every available bit of space. Wherever small parks are created, the verdict of the police is unanimous that they have changed the character of the neighborhood. The hoodlum instead of taking his necessary exercise in annoying passers-by or destroying property, takes it by games of various kinds or in using the gymnasium apparatus put up for him. That these statements are in no wise exaggerated can be easily proven by inquiry into the results of the establishment of such places as the Mulberry Bend Park in New York and the Hudson Bank Gymnasium which has transformed one of the worst criminal districts of that city. There the Outdoor Recreation League has put up a complete open air gymnasium, and girls and boys, men and women, after a hard day's work come here to take the exercise and recreation they have no means nor knowledge even to furnish themselves, but which the rich take good care to provide for their own, as witness bicycle and ball games, golf clubs and gymnasia, tennis and other tournaments.

Have you ever thought what life would be without any and all of these

means of recreation? Have you ever thought what they have meant in your own life? Try to picture it and you must be eager to provide similar means of renewing and toning up life for others. Why, the merest selfishness would cause you to do so, because it would produce more and better work. So convinced have not only thinkers but men actively engaged in the world's work become of the necessity for this that in all our large cities steps are being taken to provide playgrounds and gymnasiums as rapidly as possible.

Boston has one model—the Charles Bank Gymnasium—and has purchased ten tracts of land which it is fitting up as rapidly as possible. Philadelphia has an association whose special business it is to further the establishment of such grounds. Chicago has a recently appointed commission of aldermen and citizens which is selecting and purchasing sites for small parks and playgrounds. Space will not permit me to go on with the list, but thirty or forty cities are actively at work on the problem and making provision for small children and large, for boys and girls alike. Nor is it sufficient to merely create open spaces. They must be adequately fitted with apparatus and should have a supervisor who can teach its use, encourage skill and make the turbulent element feel its ownership in the property. Thus it will soon come to use it properly and to desist from turbulence since it will find the use of the apparatus and the playing of active games much more interesting.

San Francisco, with a climate which makes it possible to encourage outdoor life during the greater portion of the year, has both a greater responsibility to supply adequate outdoor spaces which are the property of its citizens, and a greater privilege in that its investment must be of greater value since it can be used almost twice as long as that in the less-favored Eastern cities.

Too little provision is made for the so-called bad boy who may be of much

finer clay than his good brother—the cart horse is less restive than his high-bred brother and far less apt to take the bit in his teeth and run. We must provide for him accordingly if we have wit or wisdom.

It would, therefore, appear that in the interest of good citizenship and of economy in morals and even—what seems of greater importance to some—of economy in money, that one of the most necessary steps to be taken in our commonwealth is to establish such playgrounds and outdoor gymnasiums as may compete in their attractions with the many attractions of the street. The child is father to the man and the street is no place of rest nor refuge for one nor the other in his leisure moments. May the wise see to it that resorts for upbuilding recreation take the place of our present lack of them, places that shall insure such occupations of leisure hours and such outlet for youthful energy and animal spirits that we shall produce a generation strong and joyous and fortified to resist and repel with a happy laugh every deteriorating temptation and tendency.



### Dusty "Dustless" Roads.

The method of oiling roads in Kern county, as adopted by the Dustless Road Company, is a failure, in the opinion of the supervisors. In the spring L. B. DeCamp, for the aforesaid company, entered into a contract with the supervisors to oil 22 miles of road, and to keep them dustless from then until December 1st. For this the county was to pay \$250 per mile. After the oil had been applied, DeCamp put in a bill for a part of his money and got it. But developments show that the roads receiving the treatment are by no means dustless and are even in some places worse than they were originally.—*Bakersfield Californian*.

### Uses of a Municipal Lodging Houses.

The favorable report of the Municipal Lodging House of Syracuse, N. Y., which has just closed its first year, argues it an unqualified success and a worthy model. The scheme is especially suited to those cities whose municipal governments do not seem to be able to meet the question of clean streets, and judging from what has been done in Syracuse in that respect, it looks as if a like institution in Chicago might go toward solving the problem of tidying up the town. The cost of maintaining this house for the first half-year was something less than \$2,700, and the city received in turn 12,000 hours of street sweeping and snow shoveling. Besides this, it reduced considerably the number of vagrants, furnished unskilled labor to those who required it and work to those who were willing to work. Thousands of meal tickets were distributed among householders and business men, which arrangement relieved the conscience of any guilt in the matter of giving to the unworthy or withholding from the worthy. Those who apply for lodging are required to register their name and occupation, to remain in at night instead of on the street, and to use the bathroom. A reading-room is provided and three substantial meals a day. After a seven o'clock breakfast the men go out with an attendant and work until noon. In the afternoon they are free to seek employment. They are allowed to remain two weeks, but the report states that nearly all find work before the expiration of that time. The positive benefits of such an institution are enough to commend it, but the negative ones are just as great. What it saves these unfortunates from in the way of crime by furnishing them with an honest means of relieving their most immediate needs, and what it saves the city in the way of prosecutions, no man can tell.—*Editorial: Chicago Tribune, July 30, 1900.*



### Women as Germ Scavengers.

A woman entered the office of the president of the "Cleaner Dallas League" the other day and, pointing to her skirts, indignantly said:

"This is what I get for believing in your reform League! When I left home an hour ago, this skirt was clean. Now look at it! I am disgusted with your reform."

The president said the skirt was, indeed, a sight to behold, being in an unspeakably filthy condition. And he noticed that it touched in front and dragged behind. The woman confessed that she had not held it up, but allowed it to sweep along the pavement. The president replied:

"If all the women would do as you have done, we would not be obliged to add to our sweeping force."

It is most amazing, in the eyes of the sterner sex, that women should so carelessly permit their skirts to drag along the sidewalk, gathering all sorts of filth, dirt and disease germs. It has been, for a long time, a positive menace to public health. By frequent tests well known scientists, both at home and abroad, have demonstrated that the most deadly disease germs are found on the skirts of women who allow them to trail in the street. And it has been shown to be a fruitful source of contagion and spread of disease.

Our Health Officers would materially add to the healthfulness of their cities if they would secure the passage of an ordinance prohibiting the wearing of long dresses that drag on the street.—  
*City Government.*

### What Cities Tax Telephones?

—, Cal. July 2, 1900.

*Editor of City Government:*

What cities charge a license tax on telephones, i. e., a stated price on each 'phone? Also what cities impose a ground rent charge for the telegraph, telephone and electric poles set in the streets?

H. A. MASON.

The state of Ohio has recently passed a law which requires that each telephone throughout the state be placed upon the tax duplicate at a valuation of \$10. The state auditor estimates an income of \$4,500 from this source this year and that back taxes to the amount of \$23,000 will be collected.

Will our readers communicate with the Editor and inform him what the practice of their city may be?—[Editor of *City Government*.]

BRADFORD, Pa., Aug. 14, 1900.

*Editor of City Government:*

Replying to the question of H. A. Mason, in "Department of inquiry" for August, relative to telephone tax, our city has an ordinance taxing telephone poles \$1 per year.

EDWARD C. CHARLTON,  
City Clerk.

LOUISVILLE, Ky., Aug. 14, 1900.

*Editor of City Government:*

Replying to the inquiry of H. A. Mason in your August issue, our Council has just passed an ordinance which requires all telephone pay stations to pay a license fee of \$50 per year.

This includes all the little sub-stations in drug stores, etc., as well as the larger ones.

YOUNGSTOWN, O., Aug. 11, 1900.

*Editor of City Government:*

In reply to the question of Mr. Mason in your last issue, I would say that, by a recent ordinance all telephone and telegraph poles are to be taxed at the rate of \$1 per year. The first census of poles ever taken in this city has just been completed and shows the following results:

Western Union Telegraph Co.....	255
Postal Telegraph Co.....	100
Central Union Telephone Co.....	714
Sandusky Telephone Co.....	807
Sandusky Electric Light Co.....	976
Sandusky & Interurban Ry. Co.....	248
Peoples' Electric Ry. Co.....	245
Total.....	3,345

### Some Tax Rates.

During the past month most of the California cities have fixed the rate of taxation for the current year. In making comparisons the amount levied for school taxes should be excluded, as cities of the sixth class have no authority to impose a tax for school purposes, the levy being made by the county board of supervisors. From the local papers we find the following rates reported, the figures being the number of cents levied on each \$100 of property valuations:

St. Helena 50, Emeryville 50, Sonoma 55, National City 55, Corona 65, Kern 60, Selma 65, Napa 65, South Pasadena 70, Paso Robles 70, Long Beach 75, Vacaville 75, Martinez 75, Hanford 85, Santa Clara (school 15) 95, Redlands 98, Petaluma (school 19) \$1.00, Suisun 1.00, Berkeley (school 30) 1.00, San Rafael (school 20) 1.00, Riverside 1.00, Bakersfield 1.10, Oakland (school 18) 1.17, Santa Barbara 1.20, Santa Rosa 1.25, Healdsburg 1.25, Elsinor 1.30, Los Angeles 1.30, Sacramento 1.30, Modesto 1.40, Vallejo 1.40, Redwood 1.40, San Bernardino (school 25) 1.70, Santa Cruz 1.75, Marysville (school 21) 2.00.



### A Park With Novel Features.

One of the most unique parks, when completed, in Philadelphia, will be the Starr Garden Park. Situated, as it is, in the congested district around Lombard and Sixth streets, plans have been prepared making it a combination of both playground and park.

One of the characteristics of the new park will be the arrangement of trees so that one inside the park will appear to be surrounded by a thicket, which screens the unattractive street surroundings from view. To complete this effect each of the four entrances from the several street intersections curve around beds of shrubbery, thus effectually shutting out the surroundings.

In the very centre of the park will

be erected an unusual style of pavilion. Under an ample roof is a large space reserved for a huge sand pile for the delight of little folks. Surrounding this will be a raised platform, which will screen the unsightly sand pile from view, and at the same time afford a resting place for mothers, who can watch their children at play. Inclosing all will be a rustic fence.

To the west of the pavilion it is proposed to provide a large shallow pool of running water, where the little folks can paddle around to their hearts' content. This feature has been introduced in playgrounds in other cities, and has proven to be the most popular of all amusement features for the children.

On the other side of the pavilion it is proposed to erect a large drinking fountain, supplied with cold water from an ice chamber below. No feature could be secured that is more needed than this, and it would be the greatest boon to the thickly populated section of the city, where suffering is general in hot weather.—*City Government.*



### County Licenses in Cities.

While the practice of collecting licenses by county authorities within the limits of cities is quite general, yet it is pleasing to note that an enlightened sentiment on the subject prevails in many counties.

The following counties impose no licenses whatever in cities: Ventura, Alameda, San Mateo, Los Angeles, San Benito, Riverside.

The following impose a license on saloons only: Orange, San Bernardino, Napa, Santa Barbara, San Diego, Santa Clara.

San Joaquin county licenses only banks and brokers in municipalities.



San Jose has leased a portion of Alum Rock Park for hotel purposes.

Jas. Stanley has obtained the contract for constructing the sewer system for Marin sanitary district.



## What the Cities are Doing.

Yuba City is talking of incorporating.

Berkeley has limited bill boards to six feet in height.

An Improvement Club has been organized at Santa Rosa.

Santa Monica has purchased a Holiway chemical engine.

Elsinor has increased its water supply and now has an abundance.

Haywards is considering the acquiring of a municipal water system.

Grass Valley will vote on a number of amendments to its city charter.

Oakland has passed an ordinance limiting bill boards to 10 feet in height.

Susanville, Lassen County, has incorporated as a municipality of the 6th class.

Alameda's proposed new charter was defeated August 31, by a majority of 84 votes.

Hanford has commenced proceedings for a bond issue of \$60,000 for a sewage system.

Petaluma is improving its sanitary condition by important extensions of its sewer system.

The new freeholder's charter of Salinas, has been completed and is ready for submission.

Gilroy will build a new dam at its reservoir and make other improvements to its water system.

Berkeley is considering amending its charter by raising the limit of taxation from 75 cents to \$1.00.

Marysville has just purchased a Racine combined chemical engine and hose wagon at a cost of \$2,250.

Pasadena has passed an ordinance prohibiting chickens from trespassing on neighbors' flower gardens.

The gift of a public drinking fountain, by Mrs. Phoebe Hearst, to Berkeley, has been accepted by the city.

Los Gatos is considering a bond issue for the following purposes: Extension of sewer system, an electric light plant, fire alarm system, purchase of a park. The subject will be discussed at a public meeting of citizens before the Trustees take definite action.

San Diego has adopted measures looking to the acquirement of the works of the San Diego Water Company, the purchase price to be \$500,000.

San Jose has adopted plans for a new public library building and a bond election to provide the means for constructing it will shortly be called.

Stockton's bonds, to the amount of \$52,000, bearing 4 per cent. interest, have been sold to E. H. Rollins & Sons. The premium bid was \$113.00.

Marysville will receive bids on October 11th for an induction motor and pump having a capacity of 15,000 per hour. This for pumping sewage and drainage water.

Hanford has adopted the plans for a new sewer system, as submitted by Engineer Bromfield. The plan embraces the septic tank method of sewage disposal.

Ph. Meyer, the owner of the Livermore Gas and Electric Works, has offered to dispose of the same to the town for \$15,000. The Trustees have the matter under consideration.

Oakland has purchased two new fire engines for the protection of the "annexed district." One is an Amoskeag, for which A. L. Fish is the Coast agent, and the other is a Metropolitan, for which R. S. Chapman is the Coast agent. Each cost \$4,500.

Mill Valley, Marin County, has incorporated as a town of the 6th class, with the following officials: Frank F. Bostwick, Jacob Gardner, A. W. Bush, Chas. Storck and O. C. Coppelmaun, Trustees; L. L. Jancs, Clerk; A. L. House, Treasurer; Richard McDonald, Marshal.

J. H. Brothers, city clerk and the secretary for the city light plant, has enrolled the names of all parties taking lights. The plant is now running 1440 private lights, 10 arcs and 52 32 c. p. street lights. The estimated income is over \$450 a month, which is about \$60 per month more than the expenses.—*Ukiah Dispatch*.

The Sunset Telephone Company has ordered taken out all telephones in the city of Woodland for which contracts expire on October 1st. The telephones will be taken out as fast as the contracts expire. The reason ascribed for this radical change is excessive taxation by the county and city. At its last sessions the County Board of Equalization increased the company's assessment \$10,000 and the city increased it from \$5,550 to \$19,500. The company claims it cannot maintain a profitable business with such assessment.

# CALIFORNIA MUNICIPALITIES

VOL. 3.

OCTOBER, 1900.

NO. 3.



SCENE AT ALUM ROCK PARK, SAN JOSE.

SAN FRANCISCO OFFICE,  
Room 14, 8th Floor, Mills Building.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.

Published at Santa Clara, Cal.



LATEST, GREATEST, BEST

# WORK OF TRAVEL

EVER PUBLISHED.

## JOHN L. STODDARD'S LIFE WORK

In Enduring Form. A Complete Edition of the Identical Travel Lectures delivered by Mr. Stoddard during the past 18 years.

TEN SUPERB CROWN OCTAVO VOLUMES.

The Complete Library of Travel, embracing every place in every land that allures the traveler.

THE WHITAKER & RAY CO., 723 Market St., San Francisco.

Write for free specimen pages.

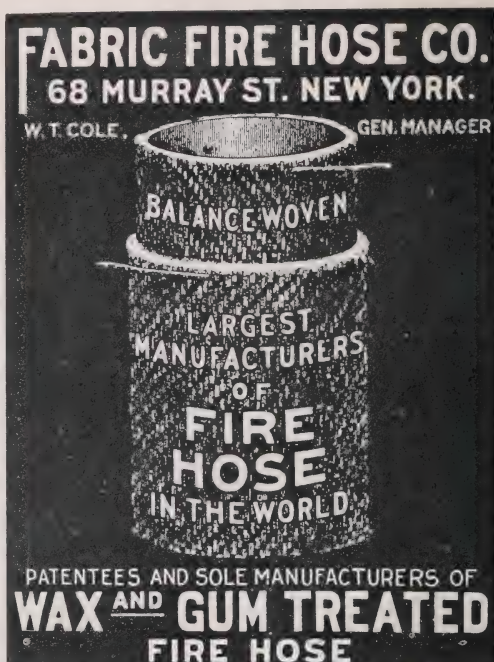


### Use Yates' Paint

On all Public Work.

### It is DURABLE.

Manufactured in San Francisco, at 117-119 Market Street.



San Francisco Headquarters at 509-511 Market St.

New York Belting & Packing Co., Ltd.

# P & B

## Building Papers

## Ready Roofings

ALL DEALERS

MANUFACTURED ONLY BY

## Paraffine Paint Co..

## San Francisco

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 3.

October, 1900.

No. 3.

## California Municipalities.

Published Monthly.

H. A. MASON,

Editor.

Office of Publication, SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

### CONTENTS.

#### EDITORIAL:

The Next Convention.....	71
What the Convention Is Not.....	71
The Sale of Franchises.....	72
A Burning Shame.....	72
An Active League.....	72
Some Problems Met in the Municipal Lighting of Riverside— <i>W. B. Reynolds</i> .....	73
Statistics of Water, Gas and Electric Lighting Plants.....	77
Suggestions as to Needed Legislation.....	79
Progress of Municipal Improvement.....	81
Tar Macadam.....	82
Water Waste Prevention.....	84
Rest Rooms for Farmer's Wives.....	84
Los Angeles in Line.....	85
Difference Between Asphalt and Bituminous Rock.....	85
A Munificent Gift.....	85
LIBRARY DEPARTMENT.....	86
October Greetings—Small Appropriations— The Coon Skin Library—Pasadena's Re-opening— Portland, Or., Libraries—Seattle Library—Berkeley Library—Traveling Libraries—Libraries in Los Angeles County—( <i>Mary L. Jones</i> )—Donations to Institutions.	
What the Cities Are Doing.....	91
Recent Court Decisions.....	92
New Pumping Plant.....	93
The Retired Farmer in Town.....	94
Gifts to Public Bodies.....	94
An Enquiry.....	94
Selections.....	94
Notes.....	95

## COMMENT.

**The Next Convention** The Third Annual Convention of the League of California Municipalities will be held in San Francisco on December 12, 13 and 14. It is expected that this meeting will be the most important and interesting of any yet held. All officials of cities belonging to the League are privileged to attend and it is to be hoped that every municipality will be generously represented. Cities not yet members of the League should join at once and thus qualify themselves for representation and profit by the advantages offered by the association. More than sixty of the municipalities of the state are now associated and it is almost impossible to conceive of the good that may be accomplished by the coming together of the officials of these cities where a mutual exchange of experiences will take place and new ideas concerning municipal administration are sure to be given forth for the good of all. It will be a very unreciprocative official who will go away without adding something to his store of useful knowledge.



**What the Convention Is Not** So much has been said concerning the tendency of public officials to spend the public funds foolishly and riotously, that the League wishes it distinctly understood that these annual conventions are not "junkets." The program does not embrace any excursions, banquets or theatre parties. "Diversions" will be few and far between. The coming



convention will be strictly business. The subjects to be discussed embrace uniform accounting, the proposed new street law, sanitary regulations, sewage disposal, sale of franchises, operation of public utilities, and needed legislation along various lines. It is worth the while for city officials to make some personal sacrifices in order to attend the meeting.



**The Sale of Franchises** In the case of *Pereria vs. Wallace*, decided by the Supreme Court on July 31, the law directing the sale of franchises to the highest bidder (Statutes 1897, page 135) has been declared to be unconstitutional so far as the sale of franchises for supplying water and light is concerned. It is a question as to whether the decision does not go to the extent of forbidding the "auctioning" of all franchises, for this method of selling a franchise is creating a monopoly. At any rate there is now apparently no sure method provided by which cities may receive a compensation for franchises—at least for supplying water and light. In many cities they have disposed of franchises in this way and have been anticipating a considerable revenue from the public service corporations. These attractive revenues have apparently "gone a glimmering." Unless some remedial legislation is had, cities will be compelled to keep on giving away valuable privileges.—subject to the right to control rates.



**A Burning Shame** Controlling rates! An example of the futility of attempting to control and fix rates to be charged by public service companies is afforded by the suit of the Contra Costa Water Company against the City of Oakland wherein the corporation seeks to enjoin the city from enforcing the rates established by the

city last February. The city obtained an order to examine the books of the water company only to find most of its books had been burned as so much rubbish a year or more ago. Now the city cannot establish the cost of the plant, or how much of the present value is represented by the original investment of capital. It is actions like this on the part of public corporations that make the public despair of ever successfully enforcing an official schedule of just rates. It is such acts that make a thousand converts to the idea of public ownership; whereas mere argument and theory would make but one convert. There is certainly a chance to reform corporate methods. What a howl there would be if a city were to burn some of its public records!



**An Active League** The Iowa League of Municipalities is showing a degree of energy that is commendable and promises to become a power in municipal advancement. Its third annual convention is being held this month and the program is an excellent one. Furthermore, it has just commenced the publication of a monthly magazine entitled "Midland Municipalities." It is gotten up in much the same style and is about the size of this magazine and contains much that is of general interest. Frank G. Pierce, Mayor of Marshaltown, is the editor in chief. Every State League should have its official publication. It is a means of keeping up interest in municipal work. And there might be an exchange of publications. We have made a proposition to send a copy of CALIFORNIA MUNICIPALITIES to the mayor of each city belonging to the Iowa League; in return therefor a copy of *Midland Municipalities* to be sent to the chief executive of each member of the California League

## Some Problems Met in the Municipal Lighting of Riverside.

IN the summer of 1895 the City of Riverside voted 5 per cent bonds to the amount of \$40,000 for the purpose of installing a municipal electric light plant. In addition to steam power several near-by water powers were considered. These plans, however, required, more funds than the city had at its disposal and this, together with other reasons, induced the Board of Trustees to give up the plan of producing electricity and, instead, to instal a plant for distribution only.

Accordingly only a sub-station with transformers, meters, etc., and a distributing system were put in. A contract was made with the Redlands Electric Light and Power Co. by which that corporation agreed to furnish the city with 200 to 600 horse-power of electric current at 10,000 volt pressure. The power-house of this company is located in Mill Creek canyon distant  $21\frac{5}{8}$  miles from Riverside. The power is water power. the entire flow of Mill Creek, whose ordinary summer flow was supposed to be 800 inches, being used under a 500 foot head. The contract provided that the city should pay \$3 per horse-power per month for electricity delivered in Riverside measured at the maximum load or peak during each 24 hours run.

It was the original expectation to light the city with about 90 arc lights, 2000 C. P. each, and to use about 1000 incandescent lights. A few of the latter were to be used on the streets but most of them to be used in furnishing light to private consumers. At that time the power resources of the Redlands E. L. & P. Co. were considered more than ample to take care of these demands.

The growth of the city's electric business has exceeded the most sanguine expectations. October 1, 1900, there were 7311 sixteen C. P. lamps in use in residence and commercial lighting; 400 do. on streets and city buildings,

\$75,000 library building by Mr. C. N. Fowler.

and about 75 street arc lights (latter not in use at present). The city is also furnishing day power for motors averaging about 125 horse-power and power for electric street railway averaging 30 to 40 horse-power.

Coupled with this greatly increased demand has been a serious crippling of the city's power to supply. The very light rainfall of the last three years has greatly reduced the flow of Mill Creek. Instead of an average summer flow of 800 inches the flow has been reduced to 500, 400, 300 inches, and sometimes even less, varying according to the weather and other conditions. In order to meet the demands of its customers the Redlands E. L. & P. Co. has been compelled to buy electricity from other sources as well as generate large quantities by steam. It has also installed a new water power plant under a 600 foot head and a large steam power plant of 800 horse-power capacity. Even with all these efforts the company has been unable to supply our city with power sufficient to take care of our increased demands. The result is that for nearly three years our street lighting system has been in a disorganized condition, and for the last two years the streets have been practically unlighted. Our commercial business has also suffered from interruptions and shortage of current, and from low and varying voltage.

The preference has been given in all cases to the residence and commercial lighting, to the motors used in irrigating and manufacturing and to the street railway; when there was a shortage of electricity the street lights have always been shut off first rather than allow the commercial business to suffer. This, at first sight, seems hardly fair to the general tax-paying public in a system installed primarily for the lighting of the streets. There is another side, how-



ever, as the lighting of the streets at low cost, or free of cost, depends entirely on the profit derived from commercial business, this profit offsetting largely the necessary fixed charges and running expenses of the plant. Hence it was thought better for the long-suffering public to put up for a time with dark streets and thus not jeopardize the commercial business. Commercial lighting would be practically ruined by an extended shut-down and greatly injured by even a prospect of same.

There is a limit, however, to this line of argument, and our city could not afford to remain in a position in which a dry year might greatly cripple or even entirely shut off its electric supply.

In February of this year the Redlands E. L. & P. Co. notified us that it would have no water-power available for our use this year, and that it could not afford to continue giving us steam-power at the price we were paying, \$3, per horse-power per month, measured at the peak of the load. The city was accordingly forced to make a temporary one year's contract with the company for a current generated by steam power, paying therefore one cent per horse-power per hour, Watt-meter measurement, for current actually used; that is, at the rate of \$7.20 per month.

An election was held in April of this year and the citizens by a vote of over six to one voted \$40,000 bonds for an auxiliary steam power plant. These are 4 per cent 40-year serial bonds and were sold to William R. Statts Co. of Pasadena at a premium of \$724, showing, incidentally, that the credit of Riverside is exceptionally good.

Many interesting problems arose in the designing of this plant and the awarding of contracts which it might be extremely profitable to consider in detail, but there is space only to touch on a few of them.

The question as to a compound condensing plant, or a simple engine plant was given considerable attention by the

trustees and their engineer. There is no question as to the much higher fuel economy of the compound engine. Even considering the interest, depreciation, repairs and insurance on the increased investment involved in the compound engine, and further considering the higher priced labor possibly necessary to properly care for its more complicated mechanism, there would still be a decided balance in its favor. One of our consulting engineers estimated that the saving in fuel would be sufficient to pay the entire difference in original cost in six months' operation. These favorable results are based on continuous 24 hours' run at a full load and without the use of any water power current.

But it is to be hoped that the city will not be compelled to operate the steam plant continuously. We would prefer the steam power should serve simply as a reserve in case of a breakdown or dry year, or to help out temporarily with a heavy load. It is hardly to be expected that we can produce electricity by steam at \$3 per horse-power per month. In any event we hope that there will be enough water-power even in dry years to furnish us at least 200 to 300 horse-power steady load, thus necessitating the use of steam only to help pull over the extra night load, the portion of load to be taken by steam ranging from nothing at, say, 6 P. M., up to 250 horse-power at eight, and down to nothing again at from eleven to twelve P. M. On so short a run the saving in fuel of the compound engine would be only a fraction of the saving for twenty-four hours full load run, while the increased interest and other fixed charges are just as much per annum as if the engine were operated continuously.

Many thought that the fuel saving would be offset by the increased fixed charges and that a simple engine, although less economical in fuel consumption, would be fully as economical when less interest and other fixed charges were considered.

It was also thought by some that the compound engine would not reach the expected fuel economy on the very light loads at the beginning and end of the night peak load. The point was also made that a compound plant was more liable to get out of order than a simple, and that in case of break-down during the day the simple engine could be more quickly started up.

Our Board was not agreed on this question of compound versus simple engine, and, although it was investigated quite thoroughly, we fortunately (or unfortunately) did not have to decide the question. We only had about \$40,000 to spend and the compound engine plant exceeded our available funds by \$5000 to \$10,000. The writer's personal preference was for one simple and one compound engine, thus allow a choice or the use of both, as different conditions of load and of water-power supply might develop in the future.

It was thought much wiser to instal two smaller engines than one large one; this not only gives a reserve in case of breakage but the smaller engine will operate much more economically under the lighter loads than the larger engine. In case of very heavy loads both engines can be used nearly as economically as one large one.

It was originally intended to have one large 300 K. W. electric generator which could be operated by means of clutch mechanism from either one or from both engines. However, the same reasons which caused the adoption of two engines applied as well to generators, and two small 175 K. W. generators, one belted to each engine, will be installed instead of the one large generator.

Considerable difference of opinion developed as to the advantage of condensing over non-condensing simple engines. For the present we will not instal a condenser. If our load seems heavy enough to warrant, a condenser may be added later.

Both engines will be constructed

with lugs cast at the ends of the cylinders so that later high-pressure cylinders can be added and the engines changed from simple to compound if conditions warrant the change.

Belt versus rope drive caused some discussion. Belts were adopted in our case as the diameter of the generator pulley was too small for rope drive to wear well.

Surplus boiler capacity will be provided so that ample time can be taken for cleaning. Our fuel will be oil. There will be installed feed water heater, steam separator, oil separator, duplicate feed water and oil feed pumps. All piping will be covered with non-conducting covering. The piping will be arranged so that any one boiler or all can supply steam to either engine.

Both engines will have extra pulleys designed to run electric railway generators should the latter be installed later on.

Our board received a superabundance of riches when it came to bids. Eleven bids were received capable of some 300 combinations. They were finally boiled down to the following bids on steam equipment, all based on two 20x42 simple Corlis engines, heavy duty type; three water tube boilers, 150 horse-power each; one 90 foot stack; heater; steam separator; oil separator; two oil feed pumps; two water feed pumps; two 28 belts; all necessary piping and foundations, and all set up in running order.

Booth Mfg. Co., Los Angeles.	
Sioux engines, Root boilers,	
(no belts provided for)	\$22528 00
Machinery and Electric Co.,	
Los Angeles: Bates engines,	
Geary boilers	\$23773 00
Tracy Engineering Co., San	
Francisco: Nordberg Engine,	
Sterling boilers,	\$26270 00
C. E. Moore & Co., San Fran-	
cisco: Hamilton engines, Bab-	
cock & Wilcox boilers,	\$26523 00



Levi Booth & Sons, Los Angeles: Allis engines, Heine boilers, \$26680 00

Henshaw, Buckley & Co., San Francisco: Allis engines, Cahall boilers, \$27858 00

Our board was at a dead-lock and in almost continuous session for nearly a week and it is no disparagement to the unsuccessful bidders to state that the contract was awarded to the Tracy Engineering Co. of San Francisco on Nordberg engines and Sterling boilers.

The contract for two generators of 175 K. W. capacity with the necessary switch-board, meters, etc., all set up, was awarded to the General Electric Co. at \$8411.00.

Members of our Board visited San Francisco and a number of other points in order to see the various makes of machinery in actual operation before coming to a decision.

Our building will be of brick, one story; width 54 feet; built in L shape. one side 106 ft. and the other side 142 ft. long. It will be added to our present sub-station. It provides ample room for more than doubling our plant in the future. Contract price is \$4311.00. The entire plant is expected to be in operation by Jan. 1, 1901.

Our day load and after midnight load (if street lights were on) is at present about 200 horse-power, average for 18 hours. The six hour load between six P. M. and midnight, is about 400 horse-power at the highest point or peak. An estimate has been made, based on past experience, that at the end of five years our day load will have increased to 350 or 375 horse-power, and our night peak load to about 799 horse-power. Our steam equipment has been designed so that, by overloading, it will be able to take care of this entire prospective load if necessary.

Load curves were prepared representing graphically both the present and prospective loads at each hour of the twenty-four. From these curves the size of engines best suited to our

requirements was figured out. It was thought best to have the engines of such size that at present load one engine alone would economically care for the night peak load in case 200 horse-power of water-power current were available; in case water power were shut off one engine would care for the full day load and both engines together take the night peak load. As noted above, our load is expected to rapidly increase. At the five year prospective load one engine alone would be quite overloaded with the day load; two engine together rather underloaded; and for night peak load both engines together would be considerably overloaded if no water power were available; if we had 200 h-p water power both engines together would be at their most economical load when under the night peak load.

Our engines are of a size to best meet these varying conditions and at the same time operate economically. With such a varying load the extended cut-off valve motion as used on the Nordberg engine was considered a valuable feature and was one of the points which probably played a large part in the selection of this engine. This allows the engine to take steam under the range of the governor up to  $\frac{3}{4}$  stroke if necessary. By sodoing, the engines can be greatly overloaded and, at the same time, retain close governor regulation.

It was further found by investigation that a large number of Nordberg Engines were in use on this coast under a wide range of service and without a single exception were accorded the highest endorsement by the owners.

Perhaps a few figures about the results of operation of our present plant may be of interest. Original cost of plant was about \$40,000. Total plant investment up to July 1, 1900, including original cost, was \$77,352.00. Cash collected for light, power and wiring averages nearly \$2000 per month, and in May, 1900, was over \$2,600.00, giving the electric light plant credit for 40 cts.

per month for each 16 c. p. incandescent light used on the streets and in the city offices, and \$4.00 per month for each street arc-light (about one-half the usual cost under private ownership). The plant shows a net profit of \$1,331.32 for the twelve months ending July 1, 1900. This is after charging up to the plant all operating expenses, repairs, cost of current, 5 per cent. interest on \$36,000.00 bonds, and payment of \$1000.00 on principal of bonds. A showing about \$1,000.00 better would be made, or a net profit of nearly \$2,500.00, were it not for the fact that the city is temporarily selling power to the Electric Railway Company about 1,000.00 per annum less than the city actually pays the Redlands E. L. & P. Co. for such power, thus practically granting the railway a subsidy for that amount. The contract with the railway company is such that in later years the sale of this power is supposed to bring the city a profit.

In above figures no allowance has been made for gradual depreciation; repairs, however, are allowed for.

We think that when our new plant is completed we will have one of the model plants of California, and hope to show satisfactory results.

No little credit is due our very efficient superintendent of the electric light plant, Mr. F. A. Worthley, not only for the success of our plant, but also for the preliminary steps in the new. The latter will be installed under his personal supervision, which is assurance that it will be well done.

Any information in regard to our electric light plant will be gladly given at any time, to any of our sister municipalities.

WILLIAM L. PETERS.



### Statistics of Water, Gas and Electric Lighting Plants.

The fourteenth annual report of the United States Commissioner of Labor has been recently issued, and is one of intense interest inasmuch as it deals with statistics relating to water works,

gas and electric light plants. The aim of the investigation was to present for comparison statistics showing the cost of such public works under private management and under municipal management. In other words, it was to secure a basis of facts upon which arguments for or against municipal ownership could be intelligently made—but at the same time, as the report states: "This investigation not to be considered for or against municipal ownership, but for the purpose of ascertaining all the facts bearing upon this question."

The work has been very thoroughly and apparently impartially done and the report contains nearly one thousand pages most of which are tables presenting the figures covering nearly every point upon which information may be desired.

To review the work without giving many of the tables is hardly satisfactory, yet in the space available in this magazine there is no room for the elaborate reproduction of the figures. Therefore the conclusions accompanying each table can only be here presented.

#### WATER WORKS.

The investigation concerning water works include data for 1034 plants of which 659 are municipally owned and 375 are operating under private ownership. These plants are divided into twenty groups according to the amount of water consumed, and there are eleven tables dealing with different subjects connected therewith.

The first table wherein comparisons can be made between private and public water works is that which deals with the cost of production. In the matter of salaries out of seventeen groups, sixteen show a less cost per 1,000,000 gallons of water under municipal ownership and only one group wherein the salary cost is larger in municipal than in the private works. In other words, private works pay higher salaries than do the municipal works.

In the matter of wages, however, in nine groups out of seventeen, the muni-



cial cost is more than the private cost. Eight groups out of seventeen show that the private productive cost for wages exceeds that of municipal cost. The conclusion therefore is that the municipal plants as a whole pay less salaries and more in wages than do the privately owned works.

The next table of interest is that which gives the relative total cost of water per 1000 gallons, including depreciation and interest on the total investment. Out of seventeen groups fourteen shows a less cost in municipal than in private works, the difference in many groups being very marked, while in those groups where the municipal cost is greater than in the private works the excess is not large. The conclusion is that the water cost less under municipal ownership.

In the table showing the price charged per 1000 gallons the municipal plants in sixteen groups charge less than do the private plants, while in two groups the municipal plants charge more than to the private.

The general conclusions may then be stated to be:

Municipal plants pay smaller salaries.

Municipal plants pay higher wages.

Municipal plants produce more cheaply.

Municipal plants sell water cheaper.

#### GAS WORKS.

The data on this subject includes reports of 344 private and 11 municipal plants. Owing to the comparatively small number of municipal plants comparisons are not of great value. These plants are grouped according to the quantity of gas produced.

In matter of salaries, the cost per 1,000,000 feet of gas produced, is greater in municipal plants in two groups and in five groups the salary cost is greater in the private plants than it is in the municipal plants.

In the matter of wages, however, four groups show an excess in municipal plants, and three groups show an excess in wages cost in the private plants.

In the Matter of the cost per 1000 feet of gas including depreciation, and interest on the investment, in every group the figures are less in municipal than in private plants.

In the matter of cost to consumers the municipal plants sell for a less price than private plants in six out of seven groups.

The conclusions on the subject of gas works are similar to those on water works.

#### ELECTRIC LIGHTING.

The tables on Electric Lighting give data from 320 municipally owned and 632 plants under private operation.

In the matter of salaries in every one of fifteen groups the salary cost per plant was less in the municipal than in the private plants, the difference in many cases being more than fifty per cent of the private salary cost.

In the matter of wages seven of the fifteen groups report a larger wage cost for municipal plants while eight private electric light plants have a higher wage ratio than do the municipal.

The report says regarding making a comparison of the cost of electricity in municipal and in private plants that "it has been impossible to secure the basis for such a table here, owing to the fact alluded to that the product of electric light plants could not be reduced to a uniform unit." Several kinds of service, however, have been made subject to comparisons. Thus, the average price per Kilowatt hour to private parties in thirteen groups is less in municipal works than in private, and only one group shows a higher price charged by the municipality.

In every group the price charged to the municipality is less in municipal plants than in private, the difference in most cases being less than one-half that charged by the private plants.

Taking up the price charged to private users for incandescent light service, in all of the groups except two the average price charged by private plants is considerable in excess of that charged

by municipal plants; while so far as the electricity used for municipal purpose is concerned it is seen that, with the exception of three groups, the average cost per lamp per year to the municipality of its own service, is very much smaller than the price charged by private plants to the municipality, this cost in some cases being less than half the price charged by private plants.

Three other tables showing the cost of incandescent lamp service per kilowatt hour, per lamp hour and per ampere hour, show the municipal prices to be lower in every group reported.

The last table shows the price charged for arc lights per year and the groups are arranged according to the hours of service.

In the price to private users it would seem that in all the groups except one the average price charged per lamp per year is smaller in municipal than in private plants.

Comparing the average price charged by private plants per lamp per year to the municipality and the average cost per lamp per year to the municipality of lights furnished by municipal plants, it is seen that in all the groups except one the cost per lamp per year of lights furnished by municipal plants is smaller than the price charged per lamp per year by private plants to the municipality for the lights used in municipal service.

The conclusions from these tables are:

Municipal plants expend much less in salaries.

Municipal plants expend a little less in wages.

Municipal plants charge less for lights to private users.

Municipal plants furnish their own service for less than do private plants.

Another and somewhat startling fact is disclosed by the tables. Over 200 private plants report either no profits or actual loss as a result of a year's operations. Considering the charge that municipal plants are frequently operated at a loss, this statement is significant.

Every student of municipal affairs

should make a careful study of this report of the Commissioner of Labor.



### Suggestions as to Needed Legislation.

Much of the time of the next convention of the League of California Municipalities will undoubtedly be devoted to the consideration of needed legislation and in order to get the matter in shape for presentation, the Secretary addressed a circular letter to the city attorneys of all cities belonging to the League, asking them to suggest those subjects upon which legislation is most necessary. Following are the replies received to date:

Replying to your circular letter of the 1st relative to needed legislation in our municipalities, I beg to state, that in my mind, cities of this class (5th) should have the office of City Attorney combined with that of Auditor, and that no warrants against the city should be valid until passed by said officer.

From my past experience as City Attorney I have found that a number of bills are contracted and paid by Board of Trustees which are illegal, often against the opinion of the City Attorney. There should be some way of stopping the wasting of public funds, as private citizens will not and do not feel inclined to waste their private funds to prevent the same.

Very truly,

FRANK K. LIPPITT,  
City Attorney, Petaluma.

In reply to your letter of Sept. 1st, asking if this city has any suggestions to make regarding needed legislation, will say that the Trustees of El Paso de Robles suggest the following:

1. That provision be made by which a city can raise money for municipal improvements by voting a direct tax instead of issuing bonds, where the amount to be raised is small.
2. That cities be allowed to issue bonds for a shorter period than forty years.
3. That the office of Marshal be made an appointive office.

These suggestions refer to cities of the sixth class, but in some respects are applicable to other classes.

Very truly yours,

ALEX WEBSTER,  
City Attorney, Paso Robles.



One of the most needed amendments to the municipal government act is a change by which the Marshal in towns of the sixth class will be an appointive office rather than an elective one. The smaller municipalities usually secure good men as Trustees. The man elected Marshal is more than half the time an indifferent officer, entirely beyond the control of the Trustees and indifferent to a creditable performance of his duties. I hope a change can be at some time secured in this particular for much of the success of small towns depends on the Marshal. No single change in my judgment is more demanded by the class of municipalities to which I refer, the sixth.

Very respectfully,

RALEIGH BARCAR,  
City Attorney, Vacaville.

In reference to your circular letter of the 1st inst., I should like to call the attention of the committee on legislation to one point. Sections 3, 4 and 5 of Section 425 P. C. are obviously framed to secure the safe keeping of public money, but to my mind they have a bad effect when applied to a small town. Such towns do not have the facilities outside of their banks, for the safe keeping of large amounts of cash. For the treasurer to keep it in his personal possession is unsafe and would not be tolerated by any business man. It would seem to me that a law which would permit the treasurer to place the money in the bank at the risk of himself and his bondsmen, and when the municipalities did not afford proper facilities for its safe keeping would be advisable. Our treasurer claims to keep the money hid somewhere.

I offer this suggestion for what it is worth, and if I have any more will advise you.

Yours truly,

C. N. RIGGINS,  
Town Attorney, St. Helena.

Your letter of inquiry addressed to me as City Attorney, of the City of Tulare, of Sept. 1st was received some time ago, but have not had time to give it the attention that I believe the subject deserves. I have occupied the position of City Attorney here for almost six years, and of course numerous things present themselves which I think a little well-directed legislation might remedy.

With reference to revenues I am satisfied that it would be of great advantage to this municipality if the County officials were prohibited from collecting mdse. and other licenses within the corporate limits of the municipali-

ties. I think such licencies should be confined to outside territories and allow the City to have the entire benefit of such revenues.

At the present time the City of Tulare is having its regular taxes collected by the County under provisions of the Act of March 27th, 1895, laws of 1895, page 219, and we find it a great saving over the old system of having a City assessor and collector, but we also find ourselves very much handicapped by the dollar limit which is placed upon us by the Municipal Government act for cities of the 5th class, and we believe that some modification in that respect allowing a little heavier levy in case of need would be beneficial. Referring to above Act relative to collection: it is a very rudely and poorly drawn affair, and it is just barely possible to proceed safely under it, by reason of its crudities, and it could be easily remedied by a little sound judgment in rewriting it.

Tulare is one of the Cities that has outside territory attached to it for school purposes, and according to the laws as they now stand such territory is a part of the City for school purposes, and when there is a city election for electing school officers, the outside territory must be given a voting place and a full set of officers and supplies furnished. No provision seems to be made for this extra expense, and the City not being able to tax this outside territory for general expenses, all this machinery has hitherto been furnished by the city free to such outside territory. I think there should be some provision for that expense being paid by the Board of Education out of school funds. The assessment and collection of the High School tax on this outside territory, as construed by the Chico High School Board, v. Board of Supervisors of Butte County, 118 Cal., page 115, is also thrown upon the Municipalities that happen to have outside territory attached to them, and it entails heavy expense to the municipalities so situated without having any provisions for repaying itself from the outside territory thus assessed or collected from. I think the law should be so changed that the levy and collection of this tax should be made by the County, which can collect it with the other taxes without extra expense to itself. To be sure it does not make so much difference to municipalities that have availed themselves of the provisions of the above cited Act of March 27, 1895, but should they at any time go back to the old system of collecting their own taxes it would make a serious difference.

The foregoing are some of the minor matters

to which my attention has been especially called: there are weightier matters that might be mentioned, but which I have not time to present as I should like, at the present time.

Very truly yours,

C. R. SCOTT,  
City Attorney, Tulare.

In reply to yours of Sept. 1st, 1900, will suggest the following:

That an act of the Legislature be had abolishing jury trials in offenses against municipal ordinances. Such jury trials are a farce and are useless in every respect. The constitution of the state only guarantees jury trials in what would be common law offenses: *People vs. Powell*, 87 Cal., 355; *Taylor vs. Reynolds*, 92 Cal., 576, and remarks there found by Chief Justice Beatty.

I also suggest that municipalities be expressly given power to acquire real estate and water rights outside of city limits so as to avoid doubtful construction of courts as to such rights in future.

I also suggest that cities be made responsible for accidents caused by neglect to keep streets, bridges and sidewalks in repair.

Also that school law as to levy of taxes within cities of fifth class be made to harmonize with municipal code. See par. 9 on page 197, Statute 1897, and par. 8, on page 99, Statute 1899, and Sec. 1670 pot code, and *Chico H. S. Board of Supervisors*, 118 Cal., 115. No man can tell from the law quoted what the limit is for High School taxes or other school taxes in cities of the fifth class, as the law now stands. *There are others.*

Yours truly,

C. C. HASKELL,  
City Attorney, San Bernardino.



## The Progress of Municipal Improvement.

The sixth annual gathering of the National Municipal League met at Milwaukee last month. It was the most notable in its history. The papers presented and discussed were of vital interest and given wide publicity by the press of the country. An abridged account of one of the papers follows:

### THE YEAR'S WORK.

The Hon. Clinton Rogers Woodruff, of Philadelphia, who is the secretary and moving spirit of the organization,

said in part, in reviewing the year's work:

"This year the National Municipal League has 119 members and its record shows a grand total of 463 devoting all or a part of their time to the study of the municipal problem.

"These figures tell of the phenomenal growth of interest in municipal affairs within the past decade.

"When we review the shortcomings of a year we feel as if the situation were indeed grave, and so in truth it is. The official recognition and protection of vice and immorality in many of our large cities; the utilization of public power and office to serve private ends; the prevalence of official blackmail; the selfish party and factional ends; the sinister influence of corrupt corporations, present a picture at once dark and forbidding, and constitute a problem of serious import and difficulty.

"The situation, however, is by no means hopeless. For every year brings a keener appreciation of its gravity. Every year brings new forces into the field to combat the forces of evil. Every year witnesses a new development of public sentiment in the direction of higher municipal standards and advances along definite lines. Widespread corruption and political degeneracy cannot long prevail in the face of widespread investigation and discussion and efforts at improvement. If the National Municipal League has served no other function, it at least has served to show that serious as the municipal problem is, the outlook is full of hope and promise.

"One great difficulty with municipal reformers in the past and present has been a too great desire to get ahead and to introduce the political millennium without adequate political preparation. In other words, they have failed to appreciate and realize, even though they may recognize it, that political instincts and institutions are of necessarily slow growth.

"The persistency of the organized effort for municipal betterment is an



equally encouraging factor. Many of the organizations that were at work in 1894, at the time of the Philadelphia conference, or were formed shortly thereafter, are still at work, with no sign of abandoning their efforts. The City Club of New York, the Municipal Leagues of Philadelphia and Milwaukee, the Civic Federation of Chicago, the Merchants' Association of San Francisco, the Reform League of Baltimore, the various civic service reform bodies have done more than maintained an existence. They have increased in power, efficiency and influence.

"One of the great obstacles standing in the way of that separation of the consideration of municipal affairs from state and national politics, for which this league pre-eminently stands, has been the existence on the statute books of laws which place a premium on straight party voting and discriminate against the independent voter and candidate. A citizen fully determined to vote his convictions in this direction finds after entering the polling booth that the tickets and the distribution of the offices have been so arranged that it is a matter of great difficulty for him to carry out his intention. The election of United States Senators by a direct vote of the people would eliminate national politics from our state legislatures. The establishment of municipal home rule would eliminate municipal questions from them.

"There has been no abatement of public interest in the subject of municipal ownership of municipal monopolies. Indeed, there seems to be a general acquiescence in the contention that each city should own all its franchises; although there is still a great diversity of opinion as to whether the city should control or operate them. There are few indeed who are willing to maintain that a city should give away or sell for all time the right to run street railways, to furnish heat, light, water, or other municipal necessities. To advocate such a policy would be to sanction the

utilization of city property for the benefit of the few at the expense of the many. There are few who are willing to do this, so that the discussion has practically narrowed itself down to the determination whether the city shall control the franchise in a general way, reserving a fair rental, or whether it shall actually operate the plants directly. In considering this phase we find that the consensus of opinion seems to be in favor of the operation of water plants and the control of street railway operations, with opinion about equally divided on the subject of lighting. One thing is perfectly sure and that is as a result of all this discussion concerning municipal ownership, control and operation, there has been a material improvement in the conditions which the city has been able to impose; and secondly, the people have been interested as nothing else has succeeded in doing, in questions of local government. Matters pertaining to water, heat, light and transportation, come home directly to the average citizen, and any policy affecting them appeals to him as no others do."—*City Government*.



### Tar Macadam.

Among the consular reports recently published by the United States Department of State, is one on the tar-macadam pavement in Hamilton, by U. S. Consul Shephard, residing in that city. Inasmuch as asphalt is very abundant in many parts of California, it is suggested that the use of that material in place of coal tar, and following the method of construction given below, would be productive of a very good macadam. We would like to see the method tried.

Following is the consul's report, as published in the "*Municipal World*."

After years of experiment, Hamilton is laying a pavement that for excellence, durability and cheapness is commended for examination to those in

chargé of similar work in the United States.

The possibility of making good roads at a reasonable cost has been demonstrated, and tests extending over a number of years on business streets prove that tarred macadam makes not only a smooth and solid roadway, but one that can be kept in perfect repair at nominal expense.

The first cost in this city, where limestone is abundant and near at hand, is from 70 to 86 cents per square yard; and the engineer estimates the cost of repairing on heavy traffic streets at less than one cent per yard, per year while asphalt costs over three cents.

The addition of tar renders the roadway impervious to water, frost-proof in winter, and prevents mud and dust in summer. It is easily repaired and does not require scraping, thus avoiding much wearing of the surface.

One block of tar macadam laid more than a year ago on a business street where there is heavy teaming shows no perceptible wear today. In residential streets, these pavements have been in use eight years without any repairs and are still in good condition.

The success of this method of road-making depends on care in its execution, as in the case of all composite work of this character, and I submit for the information of those interested the substance of an interview with the engineer of public works, Mr. E. G. Barrow, covering details of the processes in use here.

Either stone or cement curbing should be placed before beginning the roadway. Cement costs here fifty cents per linear foot and is six inches thick, twenty inches in depth, and laid on broken stone or gravel. Corners are rounded and an iron plate imbedded for protection. On business streets stone is preferable.

An essential in roadmaking is a hard and compact foundation, which can be secured only by the liberal use of heavy

rollers, twelve to sixteen tons, while the base is being prepared.

The grade and camber should be so designed as to carry water off the surface quickly, and all earth above the sub-grade should be removed so as to conform to its level, twelve inches below the natural surface, which sub-grade should be thoroughly rolled and all soft spots filled with stone.

The foundation must be compact, a solid bed of stone not less than six inches in thickness. If the soil is of a spongy nature, large flat stones are preferred. All interstices should be filled with small stone and gravel, well rolled in. Over this a coating of gravel should be rolled hard and then a layer of tar-saturated stone, not extending over two inches in diameter. These stones being mixed with boiling tar, eight to twelve imperial gallons to the cubic yard, must be thoroughly dried, either in the summer sun or by exposure on heated plates, until all moisture is expelled.

After a thorough rolling another strata of tarred stone of the same dimensions and thickness is added, rolled and covered with a layer of gravel, and quarry chips, also mixed with tar, one inch in thickness, to be rolled down from three-fourths to one-half an inch. A top dressing of screenings is then added, and if a light color is desired it may be obtained by adding cement.

Most of the stone used here is machine crushed, but during the winter season, it is broken by hand labor and paid for per cord, to furnish employment in lieu of alms to the needy.

Limestone is used because it is abundant, but granite or flint stone would absorb less tar and stand more pressure and wear.



Clark University, Worcester, Mass., receives \$150,000 for the founding of a library, from the late Jonas G. Clark. This seems to be a banner season for college libraries.



## Water Waste Prevention.

### *Municipal Engineering.*

Mr. J. J. R. Croes has been making an investigation of the consumption of water in twenty-five houses in New York city similar to that made by Mr. Trautwine in Philadelphia some months ago and reported in these columns. His conclusions are practically the same, the legitimate use of water proving to be about 50 per cent. of the actual delivery. In eighteen of the houses the average consumption was 50.84 gallons per capita, and the waste in the other seven houses was enough to increase the rate for the twenty-five houses to 91.36 gallons per capita. The source of the waste in every case but one was defective fixtures or undiscovered leaks, many of them unknown to the occupants. In one case the closets and urinals in a saloon were treated to continual stream of water, consuming 4,522 gallons a day. Attention to the leaks saved about 5,000 gallons a day in the seven houses and reduced the average consumption in the twenty-five houses to 65.55 per capita per day, a saving of 25.81 gallons per capita without any reduction in the actual use of water.

The value of meters in detecting the waste and preventing its future occurrence is evident. The economy of installing meters that the waste may be paid for if it is allowed to continue is easily determined.



## Rest-Rooms For Farmers' Wives.

The rest-rooms for farmers' wives which have been established of late, furnish opportunity for mutual helpfulness and companionship between the residents of town and country. The main object of these institutions, which belong essentially to the progressive West, is making people comfortable, but the intellectual and social side of the question is also met. For a few years past social pavilions have been erected

at many of the Western State fairs. Chippewa Falls, Wis., and Albert Lea, Minn., were pioneers in this movement, which is gradually reaching other towns which see the usefulness of providing a temporary rest-room. To Rochester, Minn., is accredited the honor of opening the first permanent rest-room in the west, and possibly in the States. A homelike room in the business part of the city is furnished with cozy chairs, lounges, books and magazines. Here country women are invited to stop when in town on a day's shopping excursion, and every convenience is provided necessary for the welfare of the woman who has ridden many miles to town. The comfort of this room appeals strongly to women of this class, especially to mothers with tired children. Other Minnesota towns have undertaken similar work. For instance, Anoka, Minn., is a small town surrounded by a large farming district, and this place has a flourishing rest-room, which was started two years ago. A Woman's Exchange in connection pays the matron's salary, and tea and coffee are served for the nominal price of three cents. Winona, Northfield and Furbault, all in the State, have undertaken similar work with success. Following closely in this work, Eau Claire, Wis., has a rest room whose guests average forty-five a day, and York, Neb., Burlington, Kan., and Joplin, Mo., have resting places provided for their country sisters. The latter place is situated in a mining district, and the miners' wives eagerly avail themselves of the room's privileges. Convinced of these successes, the Town and County Club of Piqua, O., has opened well-equipped rest-rooms. The Club is under an efficient board of managers, and hopes to broaden its field as in Rochester, where sewing-classes are conducted and interest taken in traveling libraries. Some of these rooms are self supporting, others are under the management of women's clubs, and in some cases financial aid is given by merchants who con-

tribute with the idea of building up trade. That they foster a spirit of friendliness between town and country women is shown at a recent meeting of the State Federation in one of our Western States, where country women came twenty-five miles to attend the session.—*The Outlook.*



### Los Angeles in Line.

At a meeting of the City Council of Los Angeles, on the 24th inst., the following resolutions were adopted:

"Whereas the present uncertainty with reference to the state controlling the granting of franchises within the limits of municipalities operates as a bar to the disposition of valuable franchises with any expectation of an adequate return to the municipality, and thereby enforces the postponement of much needed transportation facilities in various portions of the city until the present law can be altered; and

"Whereas we recognize the effectiveness of the League of California Municipalities in securing needed legislation for the cities of the state; now therefore be it

"Resolved that this city become a member of the above named organization by the payment of the membership fee of fifty dollars (\$50.00); and be it further

"Resolved that his honor the Mayor be requested to unite with this body in asking said organization to secure the passage at the next session of the legislature of an enactment which shall provide for the sale and disposal of municipal franchises upon such terms and conditions as will assure full compensation to the municipality and absolute certainty of construction within reasonable time limits."



### The Difference Between Asphalt and Bituminous Rock.

A great many people, including city officials, do not know the difference be-

tween an asphalt pavement and one constructed of bituminous rock. The difference is this:

An asphalt pavement is constructed of refined asphalt mechanically mixed with clean sand in certain exact proportions.

Bituminous rock pavements (frequently mis-called asphalt) are made up of asphalt and sand as the same has been mixed by nature and deposited in vast deposits found in Santa Cruz and San Luis Obispo counties. In fact it is sand rock saturated with crude petroleum, from which the volatile oils have been evaporated, leaving chiefly the asphalt base. This material is treated with steam, disintegrated and laid on the street.

Nearly all of the so-called asphalt asphalt pavements laid in the northern part of the state are made of bituminous rock.

In Los Angeles and other southern cities, real asphalt pavements are the rule.

It is now proposed to introduce this class of pavements in San Francisco and neighboring cities. The Alcatraz Asphalt Co., which has been doing extensive work in Southern California, are now in the field for paving work in any city in the state.

They claim that asphalt is the better and cheaper pavement.



### A Munificent Gift.

The City of Marysville has received, through the hands of Mayor Brooks, a magnificent and valuable piece of property, on which will be erected a \$70,000 library building. The donation was made by John Q. Packard, a pioneer resident, who owns much property in the city limits and surrounding country. The lots on which the building is to be erected are situated on the north side of 4th street, facing C street. Mr. Packard reserves the right of possession of the lots for five years, with the privilege of removing present buildings and erecting new ones.



## Library Department

"The art of reading throws the door wide open to all knowledge."

October Greetings.

The heats of summer have passed, vacations are over, business has resumed its usual demands, and schools and universities are in full tide of operation. The educational forces of California, as represented by teachers, superintendents, professors and presidents, are carefully considering measures to be presented for action by the next Legislature. A number of important changes will be strongly urged.

Of equal importance to the Public Library interests is the complete revision of the General Library Law. This should receive not only the thoughtful attention of our Librarians and Library Trustees, but also of all members of the League of Municipalities, for it directly concerns the welfare of the whole state.

The tone of the whole measure should be a distinct and positive advance. For twenty years we have had a permissive library law, by which any incorporated city or town could establish and maintain a free library. Under these provisions about half of our cities have established libraries; the remainder have been indifferent. It is time that the signal indifference to this cause of popular education—which is the only way in which the whole community can be reached—came to an end. There is no incorporated city in California so poor that it cannot sustain a free library. Let the new law provide for the founding of one in every such city, upon petition of 25 per cent. of its tax payers, say within two years from the passage of the Act, thus allowing time for due financial arrangements. Let it further provide that every such city shall levy a minimum tax of one-half mill on the dollar per annum.

The new law should be a model one, so that our citizens may have reason to be proud of our free public libraries, as well as of our splendid common school system.

### Small Appropriations.

Vigorous complaints are being made through the press of Oakland and Santa Rosa of the small appropriations made for the public libraries of those cities. Similar criticism can be made of twenty other cities in the state. These are just complaints. No city which can possibly afford it has the moral right in these days to deny its citizens of the aids to self-education and recreation which the public library supplies. It is a short-sighted, mistaken policy to provide appropriations in a niggardly manner. The life, the influence of a city does not live in its bricks and mortar, its parks and its boulevards; it exists in the character of its citizens, and, outside of the homes of a community, there exists no more potent influence for good than a well-sustained public library. There is a remedy to meet this prevalent neglect. In the revision of the General Library Law, let one of its provisions be that the minimum sum to be annually appropriated to the support of every free library in California (excepting in those cities whose charters have their own limitations) shall be one-half mill on the dollar, to take effect within two years. The Free Public Library should be placed where it belongs, on the same plane of educational power as the public school.

### "The Coon Skin Library."

One of the early libraries of Ohio in 1803 and its influences are described by Hon. Thomas Ewing, then a boy of fourteen. "The neighbors in Athens County met," so he states, "to raise money for a public library. Poor as they were, \$100 was secured. All my own wealth, ten coon skins, went into the fund. When the sixty books were brought from Boston on a packhorse, I was present at the untying of the sack

and pouring out of the treasure. Never was a library better read; the library of the Vatican was nothing to it. The name of 'Coon Skin Library' long clung to this little collection, which, prospering for many years, had a marked influence on the mental life of that region."

#### Pasadena's Re-opening.

Pasadena celebrated the enlarging of its library building by a reception, September 21st, at which Trustee George A. Gibbs gave an address. In this ad-

the Portland Library Association. This collection consists of many choice and valuable volumes, books of plates, atlases and maps, and rare manuscripts on vellum and paper, in whose gathering the owner had bestowed loving, painstaking care,—an enthusiasm that never dimmed during his long life. Though this collection now passes into the hands of an Association Library, it is with the stipulation that it shall be free to the citizens of Portland as a reference library.



A. K. SMILEY PUBLIC LIBRARY, REDLANDS.

dress, Mr. Gibbs reviewed the growth of the library from its start in 1883, to the present day, when, with its ample appointments, it becomes one of the most important institutions of the city. Which is the next city in California—after San Jose—which will take up this good work of building or enlarging, a suitable home for its library?

#### Portland, Oregon, Libraries.

An event of special importance has just occurred in Portland. By the will of John Wilson, one of the old-time business men of that city, his library of 8,000 volumes has been bequeathed to

At this same time the decision has been reached by the directors of the free public library, conducted hitherto as a reading room and now located on the top floor of the City Hall, to place the 2,000 volumes into general circulation.

If the vigorous efforts of the Women's Federation of Clubs for the passage of a General Library Law succeed at the coming session of the Legislature, Portland can be congratulated that at last better days are in store for her people. One of its supreme needs will then be supplied by a growing free library.



## Seattle Public Library.

Seattle's library receives an increase of appropriation of \$5,000, making a total of \$27,000 for the current year. In its remarkably choice location, occupying a spacious building—formerly a private residence—in the center of a block of land, it is doing excellent work. The children's room has the advantage of a side entrance; the hours during terms of school being from 2 to 7 P. M., except on Saturday when it is open all day.

## Berkeley Library.

Berkeley joins the column of cities willing to liberally appropriate money for ree library purposes. The City Trustees have levied a tax of eight cents on the hundred for the support of their library during the coming year.

## Travelling Libraries.

This very important branch of library work is but seven years old. In this period it has rapidly spread from its first starting point in New York to more than thirty states, with over three thousand libraries in active use. The subject, long discussed in California, needs no explanation at this time. The question is, how can the travelling library do its work most effectively in California? A state of prodigious length, with many hundreds of hamlets and small towns among the mountains, far beyond ordinary transit, has problems of time and transportation to solve, which most Eastern states do not encounter. The methods of operation in the East of sending travelling libraries from the State Library, or any other central point, are plainly not feasible here. We must have something cheaper, quicker, therefore better.

The most satisfactory plan now in view is to provide in the new Library Law that any Board of County Supervisors may contract with any public library in their own county, or another county, to loan its books, upon agreed terms, to residents who may live be-

yond the limits of the place in which the library is located.

Cincinnati is doing a valuable service by lending from its public library to any non-residents in that county. Wisconsin also has a broad statute affecting the lending of books between various libraries and between libraries and non-residents. Let California follow these good examples.

## Libraries in Los Angeles County.

In 1870 the population of Los Angeles County, exclusive of the city of that name, was about 5000. This population, including as it did Indians, Spaniards and Americans, was scattered over an area of nearly 5000 square miles. To-day a conservative estimate would place the population at twenty times that figure, while the area of the county has been diminished by nearly a thousand square miles.

It would be interesting to compare the growth of this one county with that of an Eastern district of the same area. The statistics are at hand for a comparison of the material industries and to an extent of the cultural factors. The school reports are as elaborate and detailed as could be desired. In the matter of libraries there are no records. From a number of purely friendly letters of inquiry, the following interesting facts have been secured as regards the libraries of the county. Naturally the figures fall within the truth rather than without. Exclusive of the city of Los Angeles, the county contains at least eleven public libraries, six of which are free circulating and all free as to their reading rooms. In these eleven libraries are to be found 31,111 volumes, 3,148 of which were added during the past year. The total home circulation for the year has been 148,188, and total amount spent has been \$12,814.92. Three libraries own their own buildings which aggregate in value \$39,000.

When one considers that the first of these eleven libraries was founded but

eighteen years ago, the condition of affairs is most gratifying. If an argument is called for to defend a state centralization of library interests, this result of individual effort can surely be cited with effect. What has been done in Los Angeles County is no exceptional work. Every county will show like results. Much of the work is done imperfectly, much is duplicated unnecessarily, but the fact is there—the libraries are started. What is now needed is a centralizing force, an agent to extend the work into remoter places. The county organization is gaining favor in the Eastern States, and surely if the experiment proves a success, the conditions in California would adapt themselves readily to the new idea. Counties are, many of them, as large as a New England State. Travelling libraries especially could be modeled on the county system with a central state organization. A state commission is too remote for the more distant counties. It is very well for a state no larger than Massachusetts, but direct, personal help is what most of these small libraries most need. Naturally in Los Angeles County much help is given by the city library, but even that must be limited. Two of the libraries included in the above statistics have had direct aid through the training class of the Los Angeles Public Library, while a third has drawn upon the larger library for its librarian and assistant. One librarian in the county is to be admitted as a special student to the training class this winter, while a partial promise is given that this same class will assist in putting to rights another small library in the spring. So far the gifts have been conspicuous by their absence, and in so young a county financial support is inadequate. But libraries have proved their right to exist in Southern California and gifts are sure to follow.—MARY L. JONES.

#### In Memoriam.

At a special meeting of the Library

Trustees of Oakland, held September 15th, resolutions of deep respect to the memory of the late Henry A. Chittenden were passed. It was through the exertions of Mr. Chittenden that Mr. Andrew Carnegie was induced to donate the \$50,000 for Oakland's new library building.

#### Donations to Institutions.

The record of public gifts and bequests in the United States taking effect in 1899 has been surprisingly large, amounting to not less than \$62,750,000. This is the largest recorded total sum ever bestowed in one year. It includes the munificent donations of Mrs. Leland Stanford to the Leland Stanford, Jr., University; the benefactions of Andrew Carnegie, chiefly for public libraries, of \$5,000,000; John D. Rockefeller's gifts of \$750,000 for various parks and universities, and others too numerous to mention.

For the two years ending May, 1900, the record of gifts and legacies to public libraries is notably gratifying, being an amount over \$10,500,000 and represented by 458 donations, including those of Mr. Carnegie. Of this large total, about \$1,000,000 has been given in sums of less than \$10,000. The number of new library buildings erected through private liberality was 123. A few of the recent donations are mentioned below.

In Hagarstown, Md., the Bricklayers' Union has offered that each member would give a day's work on the new library building, towards which a citizen of Baltimore contributed \$50,000.

The new charter of St. Paul, Minn., abolishes the limitation of \$15,000 for annual library income and permits the raising of an adequate sum.

The contest over the will of Judge Handley of Scranton, Pa., has been settled, and a decree of court, based on the exact terms of the will, awards \$250,000 to the city of Winchester, Va., for a public library.

Elizabeth, N. J., is presented with a



Under the will of David A. Wells, the city library of Springfield, Mass., receives \$70,000; half of which is to be expended in works on economics.

Newburyport, Mass., city library received, April 30, the sum of \$20,000 for purchase of books, from John Rand Spring of San Francisco.

By the will of the late Henry D. Cogswell of San Francisco, the city of South Coventry, Conn., receives \$1,000 for the benefit of the public library founded by the giver many years ago. The town of Orwell, Oswego Co., N. Y., also receives \$1,000 for its public library.

Dartmouth College, N. H., library obtains \$10,000 by the will of Mrs. Susan Brown.

Gen. T. H. Hubbard of New York has given \$150,000 for a new library building for Bowdoin, Maine, college.

#### Selections.

"Reading is nutriment. Humanity reading is humanity knowing."—*Victor Hugo*.

"The only wealth which will not decay is knowledge."—*Langford*.

"The school teaches how to read, the library furnishes what to read, and turns life into a continuous university."—*Prof. Shaler*.

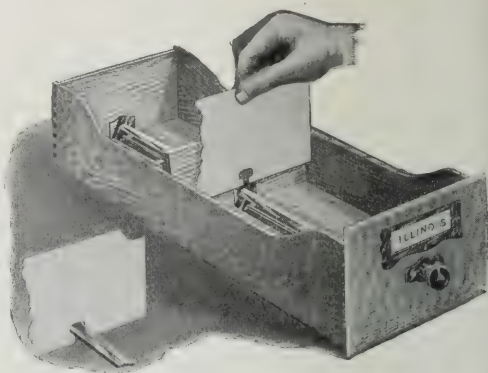


Hicks, Judd & Co., 23 First Street, San Francisco, make a specialty of binding and re-binding library books, magazines, etc. For years this firm has done this work for the leading libraries of the state and with evident satisfaction as to quality of work and prices. Prompt attention will be given to all orders.

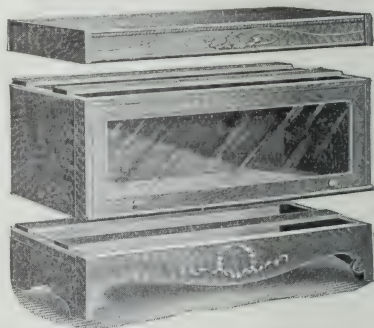


This is the age of labor-saving tools and machinery. In every department of business activity there is constantly appearing some new device, designed to lighten labor, simplify business methods and to bring into orderly relationship the various productive forces of the universe. If we hope to progress we must at once recognize the value of new inventions

and secure their aid. He who first avails himself of a new and good thing, is better fitted to succeed in life.



One of the most useful inventions in recent years, one that is designed to institute an orderly and simple system of business methods, is known as the Card Index System. By this means books in public and private libraries may be catalogued (it is the only proper system for cataloguing and to keep track of loaned books), public records may be indexed, and in private affairs a complete index made of a business.



Another modern convenience is that of sectional book cases, document and letter files, etc. The system is a combination of units, and any combination can be made.

Payot, Upham & Co., 204 Pine Street, San Francisco, are receiving these goods from eastern factories in carload lots and would be pleased to introduce the goods to anyone who thinks that he could be benefitted by using up-to-date methods.

Mr. J. S. Lawson, who has charge of the typewriter and cabinet department, understands the business of outfitting offices with this class of goods, and would take pleasure in advising anyone as to what to buy and how to use it. Call or write for circulars, and mention having read this article.

## What the Cities are Doing.

Santa Monica is considering plans for a new city hall.

Emeryville is getting ready for a lot of sewer construction.

Oceanside offers wharf bonds to the amount of \$5,000 for sale.

Pasadena has sold the crop of walnuts raised on its sewer farm.

Santa Monica has let a contract for a pumping plant to cost \$2,450.

Pasadena will vote on the adoption of its new charter on Nov. 20.

Sacramento is considering the appointment of an electric wiring inspector.

Redding's streets will be lighted with 2000 (?) c. p. arc lights at \$10 a month per light.

Monterey saloons will close at midnight—that is if they obey an ordinance recently passed.

Colusa is to be lighted with electricity when the trustees and the electric light folks agree.

The new dam at the reservoir of Gilroy's water system has been completed at a cost of \$3,000.

Visalia is considering a bond issue for sewers; a water works system may be included in the scheme.

Redwood is finding its water supply inadequate and a citizens meeting will be held to consider the situation.

Stockton is considering the abolition of high mast lights and substituting low street corner incandescent lights on posts.

Los Angeles is troubled because its lights do not burn, and the council has served a notice on the company "no lights. no pay."

A citizens' meeting at Long Beach adopted resolutions requesting the City Trustees to take proceedings requesting toward a bond issue for a sewer system.

An official report of Oakland's Board of Public Works is to the effect that the artesian wells at Robert's Landing are inadequate as a source for a municipal water supply.

The census bureau has certified that Santa Clara has a population of 3,650, sufficient to entitle it to have a freeholder's charter and a movement to secure one has been started.

Alameda's "vehicle ordinance" has been declared invalid and Oakland merchants are happy as they can now deliver goods in the neighboring towns without paying a license.

Marysville received bids on October 11th for a pump and induction motor for sewage and storm water pumping. The bids ranged from 4,400 to \$6,000 and were taken under advisement.

San Jose has imposed a license of \$750 for saloons with musical attractions. The first arrest for violating its provisions resulted in an acquittal. The jury evidently considered the law unconstitutional.

The hydraulic engineers, engaged by the City of Pasadena to appraise the value of the local water companies preparatory to a bond issue for a municipal supply, have completed their labors. The report has not yet been made public.

Notwithstanding that the Board of Freeholders now framing a new charter for Los Angeles has been declared to be an illegal body, the work will be completed. It is understood that the charter as framed will be submitted by the council as an amendment to the present charter.

The bidders for Stockton's bonds have refused to accept them, claiming the issue to be illegal on account of the notice of election having been published two weeks when the law requires three, and also that the proceedings were not in accordance with the provisions of the city charter. The City Attorney insists that the bonds are legal and other bond-buyers appear willing to take the bonds.

The city council of San Diego has unanimously adopted three ordinances in the interests of municipal ownership. They include an offer to purchase the entire system of the San Diego Water Company for \$500,000; to purchase the distributing plant of the United Water Supply Company for \$100,000, and to buy all the water the city may need for the next five years, from the Southern California Mountain Water Company, and to pay therefor 4 cents per thousand gallons. The ordinances were signed by Mayor Capps and the two companies are required to accept or reject the respective offers within thirty days.

### Personal.

Peter Crosby is a new trustee of Haywards.

A. B. Caldwell has been appointed Trustee of Long Beach, in place of R. G. Ravenscroft, resigned. Trustee Sanford of the same place has also resigned.



## Recent Court Decisions.

### Municipal Franchises—Act of 1897 Unconstitutional.

By section 19 of Article XI of the State Constitution it was intended that there should be no restriction upon competition in supplying the prime necessities therein specified to a city or town, as would necessarily result if the privilege could only be granted to the highest bidder, for such bidder would necessarily secure an exclusive right to the exercise of the franchise, the only condition imposed by the Constitution being the right of the "municipality" "to regulate the charge thereof;" and the act of the legislature of 1897 relating to this subject (Stats. of 1897, p. 135), so far as it relates to artificial lighting, is unconstitutional. *Pereria vs. Wallace*, Cal. Dec. Vol. 20 P. 62.

### Street Work—Void Contract.

Where the bid of the contractor was not signed by him, there was no valid contract and the assessment was void. *Williams vs. Bergin*, Cal. Dec. Vol. 20 P. 67.

### Street Work—Special Permits.

Where a City Council passed a resolution of intention to order a certain described portion of a street "sidewalked" and "curbed" and thereafter the work was ordered done, but intermediate the resolution of intention and the resolution ordering the work, special permits were given to owners of a portion of the property allowing them to do the work in front of their own property, and the contract for the work did not include the property for which special permits were given, nor did the assessment include it, the assessment was void because the contract did not include the entire work proposed in the resolution of intention. *Kutchin vs. Engelbret*, Cal. Dec. Vol. 20, P. 114.

### Street Work—Void Contract.

A specification in a city ordinance that all persons bidding for street work shall "file a bond in the sum to be determined by the Mayor, guaranteeing the work for one year from injury by ordinary use," increases the burdens of the property owners, is unauthorized by the statute, and a contract executed under the statute and this ordinance is void.

*Alameda Macadamizing Company vs. E. J. Pringle, et al.* Cal. Dec. Vol. 20, P. 154.

### Illegal Bonds.

The City Council of Los Angeles is submitting the question of bonds to the voters provided that for bonds for the construction of certain public school buildings should be voted for as for or against "High School Bonds" and that for bonds for construction of high school buildings should be voted for as for or against "General Public School Bonds." The former proposition was defeated, and under the proceedings it was held that bonds for "General Public School Buildings" could not be issued. *City of Los Angeles vs. Hance*, Cal. Dec. Vol. 20. P. 165.

### Amending Freeholders' Charter.

The Supreme Court in *Blanchard vs. Hart* will decide that a Freeholders' charter can be changed only by amendments submitted by the legislative authority of the City as provided by Sec. of Article XI of the constitution, and that a Board of Freeholders cannot be elect to frame a charter in a city already having such a charter.

### Street Law Constitutional—Norwood Vs. Baker Discussed.

In *Hadley vs. Dague*, (Cal. Dec. v. 20, p. 168) the constitutionality of the "Vrooman Act" was raised and the celebrated case of *Norwood vs. Baker* was cited as sustaining the contention. The opinion of the Supreme Court on this point is as follows:

"The provision in the street improvement act of this State, that in cases where, in the opinion of the city council, the work of the improvement is not "of more than local or ordinary public benefit" the cost of any street improvement shall be assessed as an entirety upon the lots and lands fronting upon the improvement, and shall be apportioned between the several lots therein according to their frontage, is a declaration by the legislature that, in the judgment of that body, the property in that district will receive a benefit from the improvement in proportion to its frontage upon the work. Unless, therefore, it is made to appear upon the face of the proceedings, or by some competent showing, that there is a gross or substantial variation from this principle, it is the duty of courts, under the rules and authorities cited, to uphold the assessment. Before the judiciary would be justified in holding an assessment to be invalid, it should be made to appear that it is,

as was stated in *Norwood vs. Baker*, "in substantial excess of the benefits," or, as was said in *Cleveland vs. Tripp*, that it "palpably transgresses" the principle upon which it is authorized. In *Fallbrook Irrigation District vs. Bradley*, *supra*, the court said: "The way of arriving at the amount may be, in some instances, inequitable and unequal, but that is far from arising to the level of a constitutional problem, and far from the case of taking property without due process of law." In *Lent vs. Tilson*, *supra*, the court said: "The benefits need not be immediate. I see no just limitation in this respect, except that a tax will not be upheld when the courts can plainly see that the legislature has not really exercised its judgment at all, or that manifestly and certainly no such benefit can or could reasonably have been expected to result. The judge should not place his mere opinion against that of the legislature." In *Sears vs. Boston*, 173 Mass. 171, the case of *Norwood vs. Baker* was invoked against the legality of an assessment which had been made in proportion to the frontage of the property bordering upon the improvement, but the court held that the statute authorizing such assessment was not unconstitutional in its application to the facts of that case, saying: "No facts appear in the present case to show that this rule is not proper in its application to the petitioner's property as a method of determining benefits with such approximation to accuracy as can reasonably be required." See, also, *Ramish vs. Hartwell*, 126 Cal. 443. There is nothing in the record herein tending to show that the appellant is entitled to invoke the principle upon which he relies to defeat the assessment. He made no objection of this nature in the court below in his answer to the complaint, nor did he offer any evidence in support of such objection, but has presented it here for the first time, in his brief in reply to the respondent. In the absence, therefore, of any facts showing that the assessment is unjust, it must be held that the statute cannot be deemed unconstitutional.

[NOTE BY THE EDITOR: A very careful reading of the foregoing text is suggested, let a misapprehension be created that the constitutional status of the so-called Vrooman Act has now been finally and for all time established. While it is true that the Supreme Court has declared the Act to be constitutional, yet it would be unconstitutional should such a state of facts exist as was presented in *Norwood vs. Baker*. The status is most curious. The

Act is constitutional, but proceedings had in pursuance of its provisions may be a violation of constitutional principles in a case where the record showed that the assessment was in "substantial excess of the benefits." Inasmuch as this issue can be raised in every case of contested street assessments, and in many cases successfully, it would seem as though nothing had been gained by the above decision. It adds to, rather than detracts from, the complexity of the Vrooman Act.

In connection with the opinion rendered in the above case, the searcher for correct principles should carefully read the cases in the Federal Courts in a half a dozen or more states wherein the several street improvement laws have been declared to be unconstitutional. There seems to be an irreconcilable conflict between the State and Federal Courts in this matter.]



### New Pumping Plant.

The city trustees on Thursday night formally accepted the new city pumping plant from the contractors after a four days trial run. Everything works finely, the pump throws a steady 7-inch stream six feet beyond the discharge pipe where it enters the outer reservoir. This reservoir can be filled in about two and one-half hours, the pump forcing up the hill about 33,000 gallons per hour.

The wells are apparently amply able to supply all the water that can be pumped, as the water is lowered but sixteen feet when the pump is running at full speed. The wells not connected are not lowered at all, showing that one well does not draw from another.

On the whole, taking everything into consideration, Oceanside has the finest domestic water supply of any town of its size in the state, and as good if not better than many larger ones.—*Oceanside Blade*.



Attention of city officials and contractors is specially called to the advertisement of the Watson Wagon Co. Economy of labor and the use of an implement specially designed for public use is secured in their recent improved dumping wagons. The use of "any old thing" in the shape of a vehicle is an extravagance, and up-to-date appliances are always the cheapest in the end.



### The Retired Farmer in Town.

When the farmer has reached a mature age and accumulated a competence, the thought often occurs to him that it would be pleasant to move to town and spend the remaining years of his life surrounded by the comforts of modern city life. If he moves to town, as he often does, his troubles begin. He has reached the age of conservatism and is opposed to any change in his condition or in his manner of life. This makes the change from rural to urban environment a hard proposition for him. For years he has been paying taxes based on a levy of possibly twenty mills, and is unacquainted with the seventy and eighty mill tax levy of our progressive cities. He finds he pays more taxes on his little property in town than he pays on the quarter section he owns a few miles away. Then he finds that the old oaken bucket is of no more use. When he wants water now he turns a faucet and is compelled to pay for his water at so much per turn. These and many more changes make him assume a position of opposition and he wishes for the farm again. About this time the street adjoining his property is paved, and he is made acquainted with the terrors of the special assessment tax. From that day he thinks that the city government needs changing, and possibly he starts in to change it. From his standpoint the greatest extravagance prevails and he complains loud and long. The progressive men, the improvement faction, the money spenders, then complain that the retired farmers are trying to run the town. It does not do any harm to have a class like this objecting to expenses, it is well to listen to their ideas, act on them whenever feasible, and they will in time become acquainted with their new surroundings and be as anxious for improvement as any other citizen.—*Midland Municipalities.*



T. M. Badger has been appointed city engineer of Benicia, in place of H. L. Demeritt resigned.

### Gifts to Public Bodies.

A citizen has presented the Town Council of Spirit Lake, Iowa, with a \$30,000 electric light and heating plant, free of arbitrary restrictions as to its use. A resident of Muskegon, Michigan, has within the last few years given to his city half a million dollars in the form of various public benefactions have been placed in the hands of public authorities. Three years ago a woman gave to the city of Boston the East Boston gymnasium—probably the first in-door gymnasium ever owned by an American city. A few months ago a resident turned over to the city council of Baltimore a completely equipped bathing establishment which he had built for the purpose.



### An Enquiry.

Has any city in this state availed itself of the provisions of the act of 1893 which provides for the "preservation, care and maintenance of shade trees, hedges, etc. within municipalities?"

If so please communicate the fact to this office. A request for this information has been received.



### Selections.

"Books are the windows through which the soul looks out."—*Beecher.*

"Education is the only interest worthy the deep, controlling anxiety of the thoughtful man."—*Wendell Phillips.*

"If the crowns of all the kingdoms of the empire were laid down at my feet in exchange for my books and my love of reading, I would spurn them all."—*Fenelon.*

In the time of Pliny the Younger, the greatest object in that age was a great book, \$1,000, \$1,200, or even \$1,500 being sometimes paid for a single volume. They were laboriously transcribed on parchment by educated slaves.

Vote for Senate Constitutional Amendment No. 14, exempting public bonds from taxation. We gain nothing now by this form of taxation and the exemption of bonds will reduce interest.



The committee in charge of the new street act has completed the final revision and it will be printed for distribution in a short time. It does not repeal the Vrooman Act but provides a distinct method by itself for doing street work.



"Our land is rough and poor; we grow but little produce, and so we build school houses and churches and RAISE MEN."—*Daniel Webster, speaking upon New England.*

**CHAS. A. NACE,**  
PRINTER.

**Pamphlet Work A Specialty.**

Estimates. **SANTA CLARA, CAL.**

# Gas and Oil Engines

— FOR —

**City Water Works**

AND

**Electric Lighting Plants,**

BUILT BY THE

**Union Gas Engine Co.**



244-246 FIRST ST.,

**SAN FRANCISCO.**

Send for catalogue, stating requirements.

# Paul Seiler Electrical Works,

Telephone Main 5454.

Manufacturers and  
Dealers in

**Paul Seiler, Propr.**

TELEPHONE, TELEGRAPH AND  
ELECTRIC LIGHT SUPPLIES.  
ELECTRO MEDICAL BATTERIES.

**406-408 MARKET ST. SAN FRANCISCO, CAL.**

# Modern Asphaltum Pavements.

Cost no more than Bituminous Rock pavements and are 100 per cent better. They do not roll or go into waves and are not spongy or soft under the heat of the sun. Our pavements are tempered to stand either extreme heat or extreme cold and are impervious to water.

We use nothing but the best and highest grades of asphalt and are prepared with the latest improved machinery and appliances and do only first class work.

Have had ten years experience in laying asphaltum pavements on this Coast and in many prominent Eastern Cities, and know our business from the ground up.

**All our work guaranteed.** Specifications and advice on asphalt construction furnished free on application.

**Alcatraz Asphalt Paving Co.,**

Room 206-7 Crocker Building, **SAN FRANCISCO, CAL.**



**BYRON JACKSON**

**MACHINE WORKS**



**Pumping Machinery.**

**First Class Plants Only.**

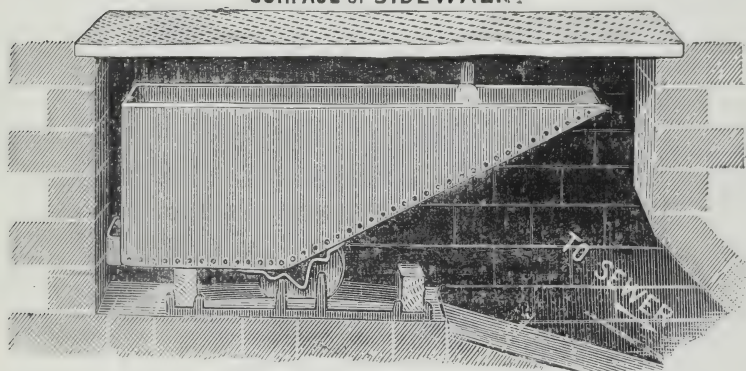
**Our Name is a Guarantee of Excellence.**

**Sixth and Bluxome Sts.,**

**SAN FRANCISCO, CAL.**

## **Alameda Automatic Sewer Flusher.**

**SURFACE of SIDEWALK.**



The only Sewer  
Flusher that works  
automatically and  
needs no attention.  
Perfect satisfac-  
tion. 1000 in use.

**Independent  
Pottery Co.**

228 Montgomery St.,  
San Francisco.

**Expert Municipal Accountants.**

**BOOKS EXPERTED,**

**UP-TO-DATE SYSTEMS INAUGURATED,**

**INSTRUCTION GIVEN.**

Address \_\_\_\_\_

**“California Municipalities”**

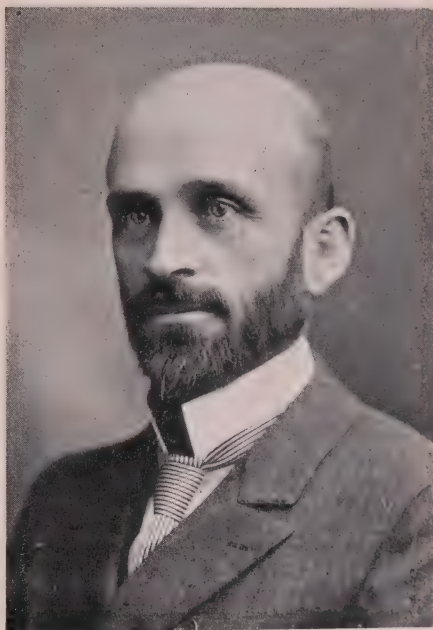
Room 14, Eighth Floor, Mills Building, San Francisco.

# CALIFORNIA MUNICIPALITIES

VOL. 3.

DECEMBER, 1900.

No. 5.



*Joseph Hutchinson, President of the League of  
California Municipalities.  
President Board of Trustees, Palo Alto.*

SAN FRANCISCO OFFICE . . . . .  
ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.





## What Did Mars Take?

When Mars, the God of War on High  
Of battles first did think,  
He girt his sword upon his thigh  
And mixed a drop of drink.

*Of course Atlas Bourbon.*

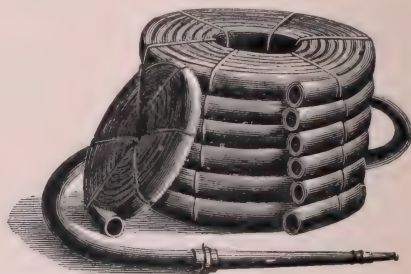
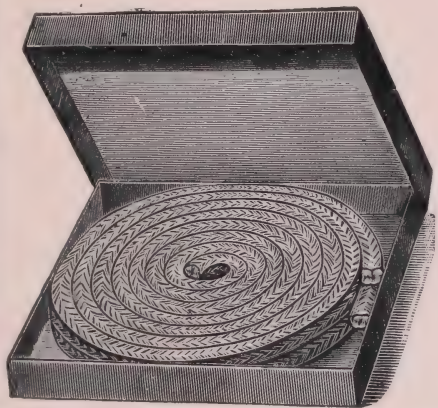
## Atlas Bourbon is Bracing

It is stimulating and the best in the land.  
Your dealer has it for sale.

**Mohns & Kaltenbach** 29 Market St., San Francisco.  
Sole Proprietors.

## Hose and Fire Department Supplies,

Belting, Packing and Rubber Goods  
Of every description.



**Gorham Rubber Co.,**  
308 Mission St., SAN FRANCISCO.

BROOKS=FOLLIS

## Electric Corporation

— Importers and Jobbers of —

**ELECTRICAL SUPPLIES,**

523 and 525 Mission St.,

SAN FRANCISCO, CAL.

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 3.

December, 1900.

No. 5

## California Municipalities.

Published Monthly.

H. A. MASON,

Editor.

Office of Publication, - SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

### CONTENTS.

#### EDITORIAL:

Convention Notes.....	135
Proceedings of 3d Annual Convention.....	
Address of Mayor Phelan.....	137
Address of President Snow.....	140
Report of Secretary.....	142
Report of Executive Committee.....	144
Report of Committee on Municipal Accounting.....	145
Report of Committee on Street Law.....	150
Report of Committee on Legislation.....	158
Amendments to Municipal Bond Act.....	159
Act to provide for Special Tax.....	160
Collection of Licenses.....	161
Appointment of Marshal and Clerk.....	163
In Relation to Jury Trials.....	165
New Public Library Law.....	166
Five Limits in 6th Class Cities.....	167
Municipal Elections.....	167
Exempting Public Bonds from Taxation.....	168
Water Works in 5th Class Cities.....	169
Weeds and Street Sprinkling.....	170
City Justices.....	171
Electric Lighting Contracts.....	172
Disposals of Franchises.....	173
Amendments to By-Laws.....	175
Election of Officers.....	175
Selection of a Place of Meeting.....	176
What the Cities Are Doing.....	177
Los Angeles Officers.....	177

## COMMENT.

The convention was a success in every respect.

Forty cities were represented this year, and the number of city officials in attendance were nearly one hundred.

Southern California cities were well represented, and as a result, the convention next year will be held at Los Angeles.

Santa Cruz sent up a large delegation consisting of Mayor Parker, Councilmen Maher and Roberts, Street Superintendent Greenfield and Electrician Waters.

The enthusiasm that Mr. Partridge of San Jose showed in the work of the convention, led some one to exclaim: "He's a bird!"

It was a matter of regret that one interesting feature on the program had to be omitted on account of the desire to conclude on Friday afternoon. This was the roll-call of cities with responses to the question: "What has your city done during the past year." Several cities were prepared to answer the above question in a very entertaining manner, and papers which had been prepared upon the subject are on file with the secretary. These will be published in due time, and if there are others who wish to go into print on this subject, the matter may be sent to the Secretary.



And Mr. Spinney was on hand with numerous practical suggestions.

Mr. Devine, of Sacramento, spoke for the tax payers.

The Town Marshals owe a vote of thanks to Mr. Kennedy, of Chico.

It is said that Mr. Miner, of San Jose, got up at 4 o'clock every morning for a month to get information on street sweeping.

It would be a good thing if all city clerks would Heed Hanscom's Hints.

Robertson of Los Gatos would insist on telling funny stories on the outside.

We missed Mayor Turner of Merced, and Mayor Sweet of Santa Rosa. The former was sick and the latter detained by sickness in his family.

Mayor Phelan was as affable as usual, and say — the San Francisco papers were roasted nicely.

Assemblyman Melick, of Pasadena, was in attendance and was interested in the discussion of needed legislation. Mr. Melick takes more than a passing interest in municipal affairs.

Mayor Snow makes an ideal presiding officer, courteous, prompt, and always saying the right thing in the right place.

The convention made no mistake in electing Mr. Hutchinson president. He is an enthusiast in the work of the League, besides being able, diligent and conscientious. His election means another year of progress for the organization.

Next year we will all go to Los Angeles, and we may be assured of a royal welcome and hospitable treatment. They can show us some fine cities down south, and the visit will without doubt prove a profitable one in many ways.

There were very many practical ideas brought out during the meeting, and it is to be hoped that the municipalities

will get to work and put some of them into practice. First, we hope that every city and town will consider the report of Auditor Breed on the subject of annual municipal reports. It will be noted that the convention committed the members to the plan of issuing such reports, and every city council and town board should adopt the order which was adopted by the convention. This was not a mere show, but means business. Let us see how many towns will have their annual reports in shape at the end of the fiscal year. And the time to commence the work is right now.

But the greatest good to the municipalities will result from the legislation recommended. It only remains to see that the acts recommended pass the legislature. If these are passed the financial advantage to the cities and towns will aggregate thousands of dollars. Besides it will enable them to make needed improvements that are now impossible. It is intended that a representative shall be in Sacramento during the session of the legislature, that all matters of legislation may be looked after. Heretofore those who had jobs to put up on the municipalities did the lobbying; this year it is proposed to endeavor to frustrate such designs and at the same time to promote measures for the betterment of the cities.

In publishing a report of the proceedings of the convention, it is found to be impossible to print every word that was said, especially in the discussions. Yet every point that was made is published and it is very close to a verbatim report. It is also found to be impossible to include all the proceedings in one number of the magazine. The last day's proceedings will be contained in the January number.

# — PROCEEDINGS OF THE — THIRD ANNUAL CONVENTION

— OF THE —

## LEAGUE OF CALIFORNIA MUNICIPALITIES.

The third annual convention of the League of California Municipalities was held at Pioneer Hall, San Francisco, on December 12, 13 and 14, 1900.

The following city officials were in attendance:

Alameda—E K Taylor, Attorney; B F Lam-  
born, Clerk.  
Bakersfield—A T Lightner, Clerk.  
Berkeley—J C Staats, Trustee; M L Hanscom,  
Clerk.  
Chico—E E Canfield, L H Burkett, Trustees;  
Guy R Kennedy, Attorney.  
Emeryville—T N Badger, Engineer.  
Fresno—Joseph Spinney, Trustee.  
Gilroy—Geo E Skillicorn, Councilman.  
Healdsburg—H H Pyne, J T Coffman, Trustees.  
Hollister—Wm Palmitag, Trustee.  
Livermore—D J Murphy, Trustee; Thomas  
Scott, Attorney.  
Los Angeles—Mayor Fred Eaton, Mayor-Elect  
W H Snyder; C H Toll, Councilman.  
Los Gatos—R F Robertson, Attorney.  
Martinez—W A Hale, Trustee; M H Hurley —  
Merced—R Barcroft, Trustee  
Napa—E W Jaensch, Councilman; J T York,  
Attorney.  
Oakland—Mayor, R W Snow; Auditor A H  
Breed; R H Clement, Engineer; R F Jack-  
son, Sec'y Board of Public Works.  
Pasadena—C C Reynolds, Trustee; Edw C  
Bailey, Attorney; W B Clapp, Engineer.  
Palo Alto—Joseph Hutchinson, Trustee, H W  
Simkins, Clerk; Paul L Culver, Attorney;  
George Barkinson, Treasurer.  
Petaluma—J Nisson, Trustee; Art. S. New-  
burgh, Clerk.  
Red Bluff—O E Moors, Trustee.  
Redlands—A E Brock, Trustee.  
Redwood City—A Kincaid, Attorney.  
Riverside—C W Finch, Street Supt.  
Sacramento—John C Ing, Chas W Payne, J  
H Devine, Councilman.  
San Francisco—Mayor James D Phelan; Super-  
visors, S Braunhart, Chas Wesley Reed.  
San Leandro—J A Gallett, A C Carey, Trus-  
tees.  
San Jose—James D Miner, Councilman; H L  
Partridge, Attorney.

San Mateo—C M Morse, Trustee; C N Kirk-  
bride, Attorney; D Bromfield, Engineer.  
San Rafael—Henry C Geiske, Trustee; Geo. L.  
Richardson, Engineer.  
Santa Ana—Ed Tedford, Clerk.  
Santa Clara, S Oberdeener, Trustee; H A Ma-  
son.  
Santa Cruz—Mayor J P Parker, J B Maher,  
F K Roberts, Councilman; C E Greenfield,  
Street Superintendent; W W Waters Elec-  
trician.  
Santa Rosa—J W Keegan, Councilman.  
Sausalito—H J Crumpton, Trustee.  
St. Helena—C N Riffin, Attorney.  
Stockton—Mayor W B Harrison, W C NeW-  
miller, Councilman.  
Suisun—E P Hilborn, Trustee.  
Watsonville—W A Trafton, Trustee.  
Yreka—U F Brown Clerk.



The convention was called to order by President of the League, Mayor Snow of Oakland.

THE CHAIRMAN: I take great pleasure in introducing you, without further words, Mayor Phelan, of San Francisco, who desires to speak a word of welcome.

### Address of Welcome by Mayor James D. Phelan.

Mr. Chairman, and gentleman of the convention: I presume that I should at this time be brief in my remarks to you, but if I were to do so, I would not then express to you the welcome of San Francisco. We are always glad to have conventions meet in San Francisco. During the last few weeks we have had



the miners and the horticulturists, and now in you we have men who are engaged in what some of us regard as an equally important work, the work of governing our cities.

We all know that it is a tendency of modern days to concentrate. As demonstrated by the last census, our population has drifted into the large cities, so that the urban population is now two-thirds greater than the population in the rural districts. Therefore the government of cities becomes, to a great extent, the government of the country, and if that government is bad government, we have bad government throughout the United States to a large extent, because the relation of the citizen to his city government is very intimate. The contact between the city and the City Hall is something which is appalling. The friction is often very great. We are endeavoring to reduce that friction and to bring results out of what in the past has not been a satisfactory organization of our cities.

San Francisco is a very appropriate place for a convention. I cannot imagine a more appropriate city in which to hold an assemblage representing the cities of the State, or even of the country. This is because we are engaged in an experiment in the inauguration of a charter, a charter which has attracted the attention of the entire United States. It has been discussed in the magazines as an advanced charter, far in advance of any organic law ever given to a municipality. It has some features which are unique, some which have not been tried before. We have had about one year's experience under that instrument, and I believe I am on the program for next Friday afternoon to briefly give you an account of the practical operation of the charter, so far as we have gone. In doing that, I shall probably be giving you something new, because the metropolitan press has found fault in the charter, including even those journals that were most strenuous in its advocacy when it was

before the people, and that by reason of the changed conditions. They have perverted the facts, they have suppressed the truth, they have engaged in misleading the public; and it is necessary, when the time comes, and this is certainly an appropriate occasion, to set forth the workings of the charter, and show wherein it is deficient and wherein it is strong. It of course has its weak points, which we are developing as we go on. In our city council, we have a committee on the amendment of the charter, to which we are referring all the knotty questions and all the deficiencies as we discover them, with a view of offering amendments in the course of another year, because the charter may not be amended until two years after going into effect, and once in every two years thereafter. So I may say we are engaged in trying out our city charter. As a general proposition, I can say that we have found it entirely satisfactory. The one particularly unique feature which we have introduced, and which is very new, is the initiative. That was tried in a rather remarkable manner in our last election. Our council or Board of Supervisors refused to pass legislation favorable to the pool-room business, legalizing, in other words, the selling of pools upon fistic affairs and races. The poolmen took advantage of that provision of the charter to enable them, upon petition, to require of the election commissioners a submission of an ordinance covering the ground, just as you would submit an ordinance to your council, to the people directly, and a majority vote of these voting upon the proposition would have enacted the measure as though it were passed by the Board of Supervisors and approved by the Mayor. The vote was something like 23,000 against and 20,000 for the measure, and while it is a narrow margin, still, it showed that the people were quite as competent to legislate as their Board of Supervisors—though it is something that we always believed. It is a rare thing, however,

for an appeal to be made under such circumstances, by what may be called the disorderly element of the community, to the people, with apparent confidence in their success. There, I say, was a demonstration of the practical working of the charter in its most unique feature and in a very satisfactory way.

So San Francisco is glad to bring you here, and give you the benefit of her experience in charter-making and in local legislation, and in practical administration of affairs. She extends to you all the hand of welcome, in her very heartiest way.

During the past summer I have visited many distant cities, going as far as London and Paris. And I will say to you that I found very little we could imitate with profit, because we are advanced in all that the law may do for us, and where we are deficient is perhaps in what we are attempting to do for ourselves. Because, after all, the law or a charter is a mere form, which, if not complied with, falls if an attempt to administer a government is made by those who are not in sympathy with it. Hence it has had to fall temporarily. So it is that much damage may come from men in power who reluctantly and in a hostile spirit attempt to comply with legal requirements.

In London, the greatest of all cities in America, there is certainly nothing which we may follow with profit or satisfaction to ourselves. I had the pleasure of calling upon the Lord Mayor of London. He presides over a district about a mile square in the heart of London, which is really the banking center. He is Mayor simply of that district, and the surrounding portions of the city are divided up into about twenty other mayoralty districts, with a mayor at the head of each one. But this Lord Mayor, of whom we hear so much, knows very little of the municipal government of London. He is elected for one year, and is paid \$50,000 for serving in a very large and elegant

official capacity. I remember him best as one clad in golden lace, all splendor and pomp, attending to his various functions. But when I asked him for some information regarding the city government of London, he referred me to the London County Council, which I found in session. That council attends to all the municipal affairs for the whole city outside that district, which is governed by a board of alderman. The London County Council was discussing the fixing of gas rates when I came upon them, something I had just left at home. The Gas Company there had announced a raise in the rates because of the scarcity of coal. There was a dearth of coal in England, and its price went up, and sympathically the price of gas rose. There were about a hundred men present, a fine looking body of men, and the members of the council protested vociferously and said it was unjustified, and reminded me in many respects of our own deliberations. What conclusion they came to, I do not know, because I sailed away. But as a matter of entertainment to the members of the League, I was ushered into the august presence by liveried personages, and while waiting, somebody came out of an adjoining room, in his shirt sleeves carrying our cards. He asked us to follow him, and we did. On the way, he said, "You will excuse me for not wearing my coat, because it is so hot." I had heard of the Chicago man who had boasted that he had only worn his coat one day in a year at dinner, as going to show the glorious climate of Chicago. But I did not expect the Lord Mayor of London to appear on an occasion like that, at about 11 o'clock in the day, in his shirt sleeves, excusing himself for so doing because it is so warm. He said, "I would like to get some information from you about western cities. Won't you lunch with me at 1 o'clock today?" We declined, on account of a previous engagement, and he said, "Come tomorrow at lunch." We realized that he was a good fellow, and that he was sin-



cere in his invitation and so we accepted. And we lunched with him at a banquet at which there were about twenty-two or twenty-three present, including his marshal and chaplain, and all were dressed in the insignia of their offices, and everything of the most formal character. I understand that is one of his functions, to entertain visitors, the payment for which is made out of the very large salary that he receives. It was upon that occasion that he referred me to the London County Council when I questioned him about the city government there.

So I am very well satisfied in returning to California with the kind of government we have in San Francisco and with the form of government. And the greatest city of the world is, it seems to me, a very poor example of municipal rule.

San Francisco, therefore, in setting up a government and trying to enforce it, works in the hope that it may set an example to other cities in the State. And, because we are misunderstood, the principal source of information being through the press, which is so misrepresenting us, I shall be very glad upon Friday to tell you what we are doing. We have the responsibility that always attends a large city, a thing that is true everywhere. We naturally look to New York and London for some light upon the question of city government. We look to them to make the experiments, and, if they are successful, the smaller cities will follow. In this western section, San Francisco is pioneering. We have a charter which I feel confident may be offered to the members of this convention, and to the cities of this coast, as a useful one. This convention is composed of members from all about us and from the interior, representing both the legislative and the administrative branches of the several city governments, and I am very sure that, in coming together and in exchanging views, great profit will come out of this organization, of which I am very proud to

have been the first president. I am glad indeed to see the League prosper, and I must express my great satisfaction at the work which Mr. Mason, our secretary, and Mayor Snow, our president, have done during the year, which I have followed with a more particular interest on account of my early connection with the League. (Applause).



### Address by Mayor R. W. Snow of Oakland.

Few men, suddenly called from their vocations to be Aldermen, Councilmen, Trustees, or to hold any other office in the modern municipality, find themselves qualified, in any large measure, to undertake the work which they have been chosen to perform.

From advantageous points of observation, close observers, honest reformers, marvel at the degree of success, not failure, that attends crude civic effort. Private corporation, cull from the foremost rank, the one man who can do some one thing well, and encourage him with ten, twenty, fifty, and even one hundred thousand dollars per annum, to excel for them in that one thing, every other man; while in municipal government—a business that has to deal, not with cheap dollars of profit, but with human lives, human endeavor, upon which there has come to hang the fate of the race—men are constantly being chosen, the very best of whom honestly confess their limited knowledge of the business they must for a brief time undertake.

There is no school for Aldermen, Councilmen, Municipal Trustees or other City officers, except this and similar brief annual sessions. The Saloon, the Church, the quasi public corporation, the newspaper; all of these would fain be teachers. But their certificates are in their own hand-writing, and too often bear the stamp of narrow and selfish motive.

Without special qualification, without

opportunity for the briefest special schooling, without acquaintance with any Gamaliel, or even with an accredited coach, any citizen is likely to find the duties of municipal office laid upon his shoulders. Ours is a government by representation, from the Capital of the Nation to the smallest district. We would not have it otherwise. The system is on serious trial for the first time in the cities of our country. The perpetuity of the system depends upon the qualification of the governed, for from their ranks men must rise time by time, govern, and step aside.

What man, finding himself facing problems new to him, has not earnestly sought for the recorded experience of men. The best way in almost everything else is blazed and charted. In municipal government almost alone, man finds himself without the benefit of a definite, tried and successful theory. But we are not dismayed. The sun sets upon a world's necessity to rise upon an American invention to meet it. When there shall be sufficient inducement, the brain and heart of the American people will leap to the task which some of us have come to see already before every urban dweller. Tentative theory and present practice, meet together at Syracuse and Charleston, Columbus and San Francisco; winnowing for present civic betterment every sound experiment, and adding year by year, little by little, to a permanent theory of government, of the people, by the people, in the City, as well as in the State.

It is with genuine pleasure that I greet you, representatives of the Municipalities of California, at this your 3rd Annual Convention. The pressing present day problems that perplex you and disturb the municipalities you represent, are given the road in the program presented to you by the Committee having the matter in charge. We recognize that this Association is made up of practical workers rather than theorists and the topics offered for your con-

sideration are essentially practical. This arrangement is in harmony too, with the Articles of our Association, whose purposes you know are, "to foster the exchange of suggestions between municipalities on matters of municipal interest; to promote systematic collection of information relating to municipal affairs; to propose and, so far as possible, influence legislation necessary to proper municipal administration and growth, and to generally interest the public in, and advocate all ideas tending to bring the municipalities of California abreast of the best cities of the world." This is the object of our Association. Its work is exclusively to advance public interests; to improve the conditions of City life.

Many of you returned to your cities from the very profitable conference of last year with a new uplift of heart, and fuller equipment for the betterment of your own municipalities. You returned to find men unchanged. Your best endeavor may in many instances have been set at naught by the jealous and self-seeking. You may not have seen a tithe of the accomplishment you hoped for. The betterment you have desired to realize may have been sidetracked by an unavoidable economy, or halted by the political toll-gatherer whose own till must be enriched, and whose hungry retinue must be fed, before progress could be made.

You have doubtless seen where without the consent of the governed, you could have accomplished far more for your own City than it has been willing to authorize. But you are not discouraged. From being so recently a reproach to the American people, to a municipal millennium, is too great a distance to be covered at a single bound. Nor is it sufficient that you alone know, or that a few of your best citizens know, what is right and best. All must come to know and desire it. It is better, in America, to lift every man a fraction of a foot, than it is to lift a choice few a mile. If you have come to San Fran-



cisco, to this 3rd Annual Convention having accomplished within your municipality this year, one new thing only, we welcome you with enthusiastic applause. Tell us how it was done.

You will hear in their proper place the reports of your Secretary, your Executive Committee, the Committee on Legislation, the Committee on Municipal Improvements and the report of the Judiciary Committee. I will not rob these of their interest by reviewing the work of the League for the year, nor by revealing the plans for the future. These reports and the program provided for you cannot fail to afford a most excellent opportunity during the three days now before us; nor fail to return to our homes with renewed hope; girt with new power, for the up-building of the cities which we have the honor, in this Convention, to represent.



### Report of Secretary.

To the Members of the League of California Municipalities.

GENTLEMEN:—

In presenting my second annual Report, the first matter of importance will be to present the figures showing the growth of the LEAGUE since its organization two years ago. At the first meeting of the representatives of California Municipalities on December 14, 1898, thirteen cities were represented and a permanent organization effected. One year later, twenty-seven cities sent delegates and the membership roll included thirty municipalities. This year I have a report that sixty-three cities have formerly joined the organization and all but two have paid the annual dues. The complete list of members is as follows:

Alameda, Antioch, Auburn, Bakersfield, Berkeley, Chico, Colusa, Emeryville, Eureka, Fresno, Gilroy, Hanford, Healdsburg, Hollister, Kern, Livermore, Long Beach, Los Angeles, Los Gatos, Martinez, Marysville, Merced, Modesto, Monterey, Napa, Nevada City, Oak-

land, Oceanside, Pacific Grove, Paso Robles, Palo Alto, Pasadena, Petaluma, Pleasanton, Red Bluff, Redding, Redlands, Redwood City, Riverside, Rio Vista, Sacramento, Salinas, San Bernardino, San Diego, San Francisco, San Leandro, San Jose, San Mateo, San Rafael, Santa Ana, Santa Barbara, Santa Clara, Santa Cruz, Santa Rosa, Sausalito, Sonoma, St. Helena, Stockton, Suisun, Tulare, Vallejo, Watsonville, Yreka.

The additional members secured during the past year was the result almost wholly of correspondence between the Secretary and the public officials, though some members were secured through the personal solicitation of Mr. Lamborn. This is evidence that the movement for a more direct unity between the municipalities is regarded with favor by municipal officials and purposes of the organization have only to be stated in order to secure co-operation by all progressive officers.

In connection with the office of Secretary a Bureau of Information for City Officials was established over a year ago. This is a department of activity that increases in usefulness as the Secretary grows more enlightened in relation to municipal affairs and the collection of data concerning municipal administration becomes more complete. During the past year I have received about fifty inquiries from city officials for information on many different subjects embracing matters appertaining to street lighting, street sprinkling, paving, sewage disposal, machinery, accounting, city charters, etc. Many legal questions have been propounded, the more important of which were referred to the Judiciary Committee. And at this time I wish to commend the faithful and painstaking work of the Chairman of the Committee, Mr. C. N. Kirkbride; in this connection I am certain that he has devoted much time and effort in the investigation of legal questions brought to his attention through the Bureau of Information. His services which have been wholly gratuitous deserve our deepest appreciation.

To show general usefulness of this

branch of our service, I can state that inquiries have been received from the officials of the following cities:

San Francisco, Oakland, San Jose, Sacramento, San Diego, Santa Barbara, Bakersfield, Kern, Colusa, St. Helena, Salinas, Hollister, Monterey, Merced, Paso Robles, Berkeley, Petaluma, Livermore, Pacific Grove, San Mateo, Vacaville, Martinez, Oceanside, Yreka and Marysville.

Inquiries have also come to this office from persons not officials, who are interested in public affairs, and editors of newspapers on several occasions have applied for municipal data.

As the LEAGUE becomes more widely known this department will undoubtedly enhance in usefulness and its services be of greater value both to officials and the general public.

In the line of municipal accounting, the Secretary, in connection with the special committee appointed at the last Convention on that subject, has made a start towards the securing of practically uniform public reports. A special account book was designed, copied from the book introduced in Oakland by Mayor—then Auditor—Snow, for the purpose of segregating the municipal expenditures under proper heads. Ten of these books were made at the expense of the LEAGUE and nine of them have been sold at a slight advance over cost. The cities adopting this account book are Santa Clara, Palo Alto, Redwood, Santa Cruz, Monterey, Livermore, St. Helena, Vacaville and Mill Valley. More can be supplied as the demand for them arises.

There appears to be a great interest manifested in municipal affairs all over the country and municipal associations are multiplying until the number engaged in the study of this branch of civil government number hundreds. The National Municipal League reports 463 civil organizations engaged in municipal work. There are State organizations of municipalities or municipal officers in the following States:

California, Colorado, Indiana, Iowa, Ohio, Michigan, Pennsylvania, Kansas, Wisconsin, Connecticut and Texas. Some of these are merely social organizations, but the majority are organized for practical purposes, and some of them are doing exceptionally good work. I doubt, however, if there is one better organized, or having a larger membership than has the CALIFORNIA LEAGUE.

I believe that much of the effectiveness of our organization is in having the support come from the municipalities; also employing some one who is willing to devote his time to the work of the LEAGUE and in the fact of having a publication devoted to municipal affairs. CALIFORNIA MUNICIPALITIES, although an unpretentious magazine, has been the recipient of many words of encouragement. As was the understanding when the Executive Committee fixed the Secretary's salary, the magazine has been sent free of charge to all the principal officials of the cities and towns belonging to the LEAGUE. In addition it has been sent to officials of non-members who show any appreciation therefor. It is also sent to all public libraries and to newspapers.

In connection with the work of the LEAGUE, I would make the following suggestions and recommendations.

1. That the schedule of dues be changed and classified according to population instead of by the legal classification.
2. That the annual dues for cities having a population of less than 1000 be fixed at \$10.
3. That if finances permit, a circulating library of books on municipal affairs to be established at headquarters and books loaned to the officials of membership cities.
4. That an annual visitation to every city belonging to the LEAGUE be made by some official.

While the annual receipts for the past year would not be sufficient to permit this to be done, yet I hope that



the income next year will be somewhat larger. If all the municipalities of the State were to join the annual revenue would approximate \$2500. With a revenue of \$2000 the objects set forth can be attained.

I have no doubt but that the membership will be largely increased during the coming year, and substantial progress made in every direction.

Following is a report of the finances of the LEAGUE.

#### RECEIPTS.

Balance on hand at last report.....	\$ 198 35
Received from dues.....	1270 00
Total Receipts.....	\$1468 35

#### EXPENSES.

Office rent.....	\$ 220 00
Typewriting.....	107 00
Salary of Secretary.....	825 00
Printing.....	23 25
Collections on warrants.....	3 50
Postage.....	28 50
Telephone.....	1 25
Stationary and Sundries.....	6 75
Expense acc't of Street Law.....	18 76
Convention Expenses.....	128 00
Interest.....	21 00
Bal. due B. F. Lamborn.....	30 00
Traveling expenses of Sec'y.....	7 00
Typewriter.....	35 00
Bal. Cash on hand.....	13 34

\$1468 35

#### ITEMIZED RECEIPTS TO DEC. 1, 1900.

Healdsburg \$20, Riverside \$20, Santa Barbara \$30, Napa \$30, Palo Alto \$20, San Mateo \$20, Oceanside \$20, Chico \$30, Rio Vista \$10, Santa Ana \$20, Redlands \$20, Santa Cruz \$30, San Jose \$30, Pacific Grove \$20, San Diego \$40, Fresno \$30, Oakland \$50, Eureka \$30, Long Beach \$20, Auburn \$20, Sacramento \$40, Colusa \$20, San Francisco \$60, Marysville \$30, Antioch \$20, San Rafael \$20, St. Helena \$20, Hanford \$20, Gilroy \$20, Tulare \$20, Yreka \$20, Nevada City \$30, Monterey \$20, Sausalito \$20, Emeryville \$20, Alameda \$30, Suisun \$20, Hollister \$20, Santa Clara \$20, Los Angeles \$50, Pleasanton \$20, Sonoma \$20, Paso Robles \$20, Petaluma \$30, Merced \$20, Santa Rosa \$20, Bakersfield \$30, Berkeley \$40, Stockton \$40.

The liabilities of the LEAGUE include the sum of \$155 due C. W. Finch on account of expenses connected with framing the new street law; also note of \$300 due Joseph Hutchinson which was borrowed at the start to promote the

League. There is now due annual dues from various towns aggregating \$300. With a slight additional revenue this year all the above indebtedness can be liquidated.

Respectfully submitted,

H. A. MASON,  
Secretary.



### Report of Executive Committee.

It is not necessary for the Executive Committee to add to the report made by Mr. Mason, the Secretary, as that shows fully the growth and work of the League during the past year.

The League has doubled in membership since the meeting one year ago, and has five times the membership it had two years ago, at the time of its organization. This rapid growth is evidence of the approval with which the purposes of the League have met from the municipalities of the State and also of the progressive spirit of the municipal authorities throughout the State. It is fair also to add that a large share of the credit for the success of the League is due to Mr. H. A. Mason, the Secretary, and the periodical, "California Municipalities," which he publishes in the interests of the League.

There are about 116 municipal incorporations in the State of California. Of these, quite a number are under one thousand in population. The League now has upon its rolls more than half of the total number of municipalities in the State, and all the large municipalities. This should make it an organization of very great influence.

The Executive Committee, during the past year, have held but few formal meetings, and all of these in San Francisco. Most of our deliberations have been by correspondence or through Mr. Mason, the Secretary.

The first important duty which came up was to make arrangements for the Secretary to give his entire time to the business of the League. At the time of

the convention of 1899, Mr. Mason was receiving substantially no compensation for his labors. About all he got out of it was his monthly commutation ticket from Santa Clara to San Francisco and what little profit he could make out of the periodical. Of course, it would not do to let this state of affairs continue, and we arranged for him to give substantially all his time to the League and the paper. For this, we agreed to pay him \$75.00 a month, and he was allowed to make such profit as he could from the paper, which, at that time, was jointly with Mr. Lamborn of Alameda.

We were authorized at the last convention to make arrangements, if we thought wise, to acquire for the League the periodical known as "California Municipalities." We have taken this matter up at one time during the year, but, when it was discussed, the ownership of the paper was both in Mr. Lamborn and Mr. Mason and there were some questions unsettled between them. We declined to act on behalf of the League in the matter until Mr. Mason and Mr. Lamborn had come together on these questions, and that has since been accomplished, and Mr. Mason has purchased Mr. Lamborn's interest in the paper. It can be acquired for the League for \$500.00, and we recommend that, if possible, during the next year, the League make the purchase, leaving the paper still in the management of Mr. Mason, upon such terms for his additional compensation as can be arranged.

There is one other matter that ought to be attended to during the coming year, but will require some additional income, and that is the proper promotion of the League by a visiting promoter. During the first year of the League's existence, some of this work was very ably done by Mr. Lamborn. During the second year, no promotion of this kind has been done, except a few visits, by Mr. Mason, to some of the towns in the vicinity of San Francisco. The growth of the League during the

past year without any such promotion has been marvelous and is evidence of the strength of the movement. But we cannot expect this to continue unless we have a regular promoter on the road to visit the cities, explain the work of the League and keep up the interest of the people in it.

We have kept the disbursements within the income and are a little ahead on the year's business, but have not yet been able to wipe out the small debt of \$300.00 which was incurred, during the first year, in connection with Mr. Lamborn's promotion trip through the Southern part of the State. We hope, however, to take care of this during the coming year.

To recapitulate the program of work for the Executive Committee for the coming year, (which, of course, does not include the proceedings of special committees, through which the true work of the League is really accomplished), the League should endeavor to consummate the following points:

First: The small indebtedness of the League should be wiped out;

Second: The periodical "California Municipalities", should be purchased and conducted by the League directly;

Third: A paid visiting promoter should be put upon the road.

Respectfully Submitted,  
JOSEPH HUTCHINSON.



### Report of the Committee on Uniform Municipal Accounting.

A. H. BREED, Auditor of the City of Oakland.

At the last annual convention of this League, a special committee consisting of Messrs. Hanscom of Berkeley, White of Chico, Lamborn of Alameda, Morse of San Mateo and myself were appointed to consider the subject of municipal accounting with a view of inaugurating a uniform system thereof for all California municipalities and to report the same to this convention.



The committee has had no meeting as a committee, but there has been a general interchange of views by the members through the mediumship of the Secretary and we have agreed to submit the following report:

The value of reliable municipal statistics ought to be apparent to all. We are engaged in the task of serving the public and have undertaken work of the greatest magnitude and importance. The functions exercised by the municipality affect the well being of half of the people of the State, and these functions are being rapidly enlarged and the time has come when expert knowledge must be applied to achieve the best results in municipal administration. The degree of expert knowledge necessary to administer the affairs of a city successfully can only be acquired by a comparative study of municipal methods practiced, and results attained, by the different cities of the State and Nation. These methods and results can only be ascertained through the published data prepared by the city officials and to make this data of value there must be some uniformity in the schedules showing municipal receipts and expenditures. The chief difficulty in the way of securing comparative municipal statistics is an utter lack of uniformity in municipal accounting, and, worse yet, an absence of book-keeping worthy of the name.

The Secretary of this League informs us that it is next to impossible to secure statistics of any great value from any but a few of the cities of the State, and that the publication of an annual report of the expenses of a city is the exception. It is the task of inducing city officials to prepare and publish their local statistics, and to do so according to an agreed plan, that we address ourselves.

The only manner by which we may secure the compilation of data from our municipalities is by voluntary action on the part of the cities themselves. We can emphasize the necessity for some

action to be taken in this matter by city officials, and possibly through the mediumship of this association may be able to bring about the desired result.

Your committee, however, believes that we should approach the end by gradual stages. To devise and to secure the adoption of a complete system of municipal accounting adapted to all cities with their varied conditions is almost impossible. We would have to combat the conservatism of city officials, and overcome many preconceived notions as to what constitutes a proper system. Nearly all municipal accountants have systems of their own, differing from one another in few and many details, and each accountant usually thinks that his own system is the one best adapted to meet his own requirements. Therefore, for the reasons above given, we would recommend no scheme of municipal book-keeping at present, believing that a proper system will be developed gradually.

We believe though, that there can be a form of annual municipal reports prepared that will, to a certain degree, be uniform and which will make it possible for us to obtain comparative data that will be valuable, not only to ourselves, but to the taxpayers and all who may be interested in municipal affairs.

To that end we herewith present certain general classifications by which municipal receipts and expenses should be divided, and following, certain schedules into which the same may be further segregated.

The receipts may be very easily segregated.

#### First, by Funds—

General	Fire
Street	Fire & Police Telegraph
Sewer	Park
Light	Police
Water	Library
School	Bond, etc

Each City dividing it into the separate funds maintained.

Then the sources of income received by each fund and the amount received from each fund should be stated, thus:

GENERAL FUND—

Received from Taxes  
Received from Licenses  
Received from Fines, etc

EXPENSES.

There should be as many separate accounts kept as there are departments in the municipality, and each of these accounts should contain enough subdivisions to permit a comprehensive knowledge of the fiscal transactions of the city. In this matter the accountant will have to use his own judgment. A lack of detail prevents a thorough understanding of the report, while too much detail is confusing. I have taken the liberty of suggesting the following schedules, being practically as we have them in Oakland, which may be varied as conditions may warrant.

LEGISLATIVE DEPARTMENT.

City Council or Trustees.  
Salaries.  
Advertising.  
Office Expenses.  
City Clerk.  
Salaries.  
Office Expenses.

EXECUTIVE DEPARTMENT.

Board of Public Works.  
Salaries.  
Advertising.  
Office Expenses.  
Mayor.  
Salaries.  
Office Expenses.  
City Engineer.  
Salaries.  
Office Expenses.  
City Hall.  
Rent.  
Fuel.  
Light.  
Janitor.  
Repairs.  
Insurance.  
City or Town Attorney.  
Salaries.  
Judgments.  
Office Expenses.  
FINANCIAL SYSTEM.  
Assessor.  
Salaries.  
Office Expenses.

Auditor.  
Salaries.  
Office Expenses.  
Treasurer.  
Salaries.  
Office Expenses.

PUBLIC SAFETY.

Police Department.  
Salaries.  
Expenses.  
Fire Department.  
Salaries.  
New Hose.  
New Equipment.  
Repairs to Engines.  
Repairs to Houses, etc.  
Fire and Police Telegraph.  
Salaries.  
New Equipment.  
Repairs.  
Police Court.  
Salaries.  
Interpreter's Fees.  
Expenses.  
Health Department.  
Salaries.  
Expenses.

PUBLIC CONVENIENCE.

Streets.  
Salaries.  
Office Expenses.  
Sewers.  
Repairs.  
Water.  
Labor.  
Sprinkling.  
Water.  
Labor.  
Culverts and Cross-walks.  
Repairs.  
Materials.  
Labor.  
Parks.  
Salaries.  
Tools, etc.  
Water.

PUBLIC UTILITIES.

Water Works.  
Extensions of Mains.  
New Machinery.  
New Tools.  
Salaries.  
Labor.  
Repairing Machinery.  
Repairing Buildings.  
Repairing Distribution System.  
Fuel.  
Supplies.  
Insurance.



**Electric Light Works.**

Practically the same as water works with addition as to cost of wiring, new lamps, etc.

**HIGHER OBJECTS.****School Salaries.**

Books, Stationery.

B'ld'gs, Repairs, etc.

**High School.**

In making reports of water and light works there should be a profit and loss account given. The expense account should show the operating expenses and interest, if any paid on bonds. A foot note should give the annual installment of principal and the estimated amount of deduction to be made on account of depreciation. The report should also show the total amount of water pumped or consumed and the number of light units produced. The profit account should show the income properly itemized.

In the street account a statement should be made of the cost per 1000 square yards of each kind of pavement. The quantity of water used on streets, and the the number of miles covered by water wagons each day, the number and kind of street lights and capacity of same and number of hours of lighting per year.

When practical, the cost of street improvements paid for by property owners should be given and the cost per square yard of different pavements should be stated; also cost per square foot of sidewalks and lineal foot for curbing and gutters. In fact put into the report everything that will likely be of interest to tax payers, and prove of value to other cities.

In addition to the matters stated in the above schedules, it would be wise to divide all receipts and expenditures into two classes—"Ordinary" and "Extraordinary."

The purpose of this is to enable the city officials to form proper estimates as to future incomes and expenses. Without this division the fixing of the annual tax levy is mere guess-work. You

will never know until near the end of the year whether your revenues are sufficient to carry you through. Frequently you will find a deficit toward the end of the fiscal year and all the municipal machinery has to be adjusted in order to squeeze through.

Now, then, how can we best secure affirmative action on the part of city officials so that an annual report shall be made that will furnish the information above provided for?

We believe that every city and town belonging to the League should interest itself in the matter and endeavor to have annual reports issued that are up to the required standard.

That the Association may put itself on record concerning this matter, we recommend the adoption of the following resolution:—

**RESOLVED**, that the League of California Municipalities in Convention assembled, commend and endorse the plan for uniform annual reports as detailed by the special committee on municipal accounting.

**RESOLVED**, that each municipality belonging to the League be requested to adopt and enforce a municipal order substantially as follows:

**ORDERED**, by the Trustees (or Council) of the City of——— that the Clerk (or Auditor) cause to be prepared at the close of the present fiscal year and every year thereafter, a report part of the financial transactions and operations of this City. That such reports shall conform as nearly as possible to the schedules adopted by the League of California Municipalities; that—copies of such report be printed in pamphlet form for general distribution; that one hundred of such copies be sent to the Secretary of the League of California Municipalities.

The Secretary of this League should distribute these printed reports so that each member of the League will have and can keep on file a report from every other municipality in the State.

Respectfully,

A. H. BREED.

### General Discussion.

Mr. Devine, of Sacramento: Mr. Chairman, I would like to ask Mr. Breed a question with reference to his report, and that is, if the work proposed by him involves an increased number of clerks. Do you mean, Mr. Breed, that every department shall have an extra clerk?

Mr. Breed, of Oakland: No. We do not have any extra clerks whatever in Oakland. We keep what we call the Department Book. The Auditor there makes his estimate to the Council, and they fix the tax levy in accordance with that recommendation. This report recommends that the Auditor of the city classify the expenditures in the books, we call them the department books over there. The same man who does the other clerical work can do that as well and very easily, if he does it right along. In a town of the size of Oakland, I do not think it takes more than fifteen minutes a day, and if is done each day, it will be very easily managed. It requires no extra clerical force whatever.

Mr. Devine: If we can eliminate politics from municipal elections, and put the candidate for Auditor under a kind of investigation, and have the civil service system, we will be able to accomplish just what you suggest in the recommendations you make. But it is owing in a great measure to the capability of the officer whether these accounts are correct.

Mr. Breed: I will state that so far as our system of accounts in Oakland is concerned, Mayor Snow inaugurated the system and I have continued it, itemizing matters very much more fully than we have recommended in our report. We have recommended about three classifications, whereas we use a great many more. For instance, under the head of City Clerk, we have fifteen different items, such as advertisements, salaries, books, blanks, stationery, maps

and map racks, having it itemized very completely indeed. That is not necessary in most cities, however. But even with all the detail we have there, we find it is very easy to keep the matter up, if it is only done continuously.

Mr. Kirkbride, of San Mateo: I would like to ask a question as to the method of keeping the books. If a bill is allowed by the legislative body and the warrant is then drawn in payment of it, when does the entry go into the books, and how is it made? Do you make it on the bill by segregating the items, or from the warrants?

Mr. Breed: This book that I call the department book is not balanced up each month; that is, it is not a part of the bookkeeping books. It is more a memorandum book for the purpose of getting at the annual statement, although, as a matter of fact, we do balance it up. Our method is this: The warrant is drawn and approved. From there it goes into a demand register, and from there it is posted into the Journal and Ledger. Then the demands are taken separately and segregated and put on the Department Book. That department book is kept for the purpose of assisting in getting out an annual report immediately at the close of the fiscal year.

Mr. Kirkbride: Then if a bill or demand were presented in which there were several items, as, for instance, an item of salary and an item of expenses, you would take that demand and enter it up in that department book. Would they be entered separately or not?

Mr. Breed: We have them made out in separate demands. We have a fund that we call the salary fund, out of which we pay all of the salaries of the regular city officials, that is, those provided for by charter, and their deputies. The firemen are paid out of the fire fund, and the sewer men are paid out of the sewer fund, while the street department men are paid out of the street fund. So if there were items for salary and also expenses, they would be



put upon separate blanks, and so very easily segregated. But they are entered first in a separate book that we call the demand register, and then from there they are scattered through the others.

The Chairman: Presuming that we were in some other city, and a bill for both salary and expenses should come in, that would not be at all confusing?

Mr. Breed: Not a bit.

Mr. Chairman: You would simply enter in the proper place on the department record books the separate items. You would segregate the items just as you would your own housekeeping expenses.

Mr. Breed: It very frequently happens that we receive bills of that character, where, for instance, the man who supplies hay and grain and wood and coal, supplies them to the different departments. We receive his bills, but we keep them separate, and it does not confuse us at all.

On motion of Mr. Hutchinson, the report was received and approved, and its recommendation adopted.

The convention then received an invitation from Mayor Phelan to inspect the new Hall of Justice, recently completed in San Francisco, and, after an adjournment until Thursday at 10 A. M., occupied the afternoon in an inspection of that modern municipal building.



## SECOND DAY.

THURSDAY, DECEMBER 13, 1900.

The convention was called to order at 10:30 o'clock A. M., by the President of the League.

After transacting some routine business, the Secretary announced the receipt of a letter from the City of Corona, sending its application for membership in the league, and the announcement was greeted with applause.

On motion it was ordered that all visiting members of the Legislature be considered honorary members of the convention. Under this order Hon. W. S.

Melick, assemblyman from Pasadena, was enrolled as an honorary member.

The Chairman announced the unavoidable absence of Governor Gage, and the convention then proceeded to the next business in order, the report of the special committee to frame a street improvement law. Mr. Hutchinson, Chairman of the Committee, made a verbal report, as follows:



## Report of the Committee on Street Law.

Mr. Chairman and Gentlemen of the Convention: There has been printed in CALIFORNIA MUNICIPALITIES a proposed street law, which is the work of your committee. I desire to say at the outset, however, that the committee does not recommend the law. It is rather our desire to show what the weak and strong points of the law are, and to thereupon merely report progress, leaving it to the convention to take such action by way of proposing a law as may be deemed best.

Your Committee consisted of nine members. Most of our work has had to be done by correspondence, since the members of the committee are from all parts of the State and all busy men. But a great deal of work has been done, especially by a few members of the committee. I am sorry to say that, although we have made a great many requests to the different municipalities for suggestions, we have received very few.

You will remember that we had a lively discussion about the Vrooman Act at the last convention, following a paper read by Mr. Beasley, of San Jose. I will state to you in a few words the points of objection to the Vrooman Act that were there urged. In the first place, it was objected that the effect of a protest of a majority of the property holders, first for one six months and then for another, permitted a majority of the property holders to forever keep off any street improvement work. It

was thought the law ought to be changed so as to remove the privilege of perpetual protest. Another objection to the present system was that no bids can be made upon a cash basis, the contractor when he bids knowing that the money is not in hand and that he must collect his bills himself, with the chances in favor of litigation on a large number, if not all, of the bills. That means, as a general proposition, that street work under the Vrooman Act costs at least one-third more than it would if done under private contract. That means an enormous loss to the public, and it was thought that some method should be provided which would determine all kinds of litigation beforehand, so that when the bidding was made, all litigation would be out of the way, and so that the contractor could get cash in hand when the work was done. A third objection was that the publications required by the Vrooman Act involved an enormous expense for printing, out of all proportion to the cost of the work. That could probably be met by simply amending the Act itself. So the other two objections remain as the chief objections.

While we were at work, two things occurred which very much limited the scope of our work. The Supreme Court of the State of California seemed to be ruling against us all the time. While the committee was in session in February last, a case, *Byrne vs. Drain*, was decided, which removed from our jurisdiction, so to speak, a large number of cities that might have been affected by such an act as we were preparing. It decided that, under the amendment to Article 12 of the Constitution in 1896, general laws cannot affect municipal matters and street improvements in cities having charter provisions—that the Vrooman Act was no longer in force in the City of Los Angeles, and that no general street act would be in effect there. Again, in October, the Supreme Court again rendered a decision, this time holding the Vrooman Act constitu-

tional. Our first thought was that it would be useless to proceed further, when Mr. Mason suggested that it would be well to have an act concurrent with the Vrooman Act, so that if the Supreme Court of the United States should hold it unconstitutional, there would be a street law instead of there being none until the Legislature could meet again. The tendency of this last decision of our Supreme Court, owing to the last sentence thereof, is rather to invite litigation than to quiet it. It is based upon the case of *Norwood v. Baker*, reported in 172 U. S. Reports. The Supreme Court of our State held that the Supreme Court of the United States did not mean to hold in *Norwood v. Baker* that the front foot principle was in itself invalid and unconstitutional, but only its application in that particular case. There is of course a federal question involved in such cases, under the principle of no confiscation of property without due process of law, and there is required yet another decision from the highest court of the land before the matter will be definitely settled, especially as all of the Circuit Courts have taken a different view of the meaning and intent of the Supreme Court in the case of *Norwood v. Baker*.

It is the opinion of your committee that some legislation upon this point ought to be adopted. With reference to some of the points covered by this proposed draft, I want to state as fairly as I can the advantages of the method there proposed, as well as the objections to it, repeating that we make no recommendation whatever in regard to it. In drafting the act, we have followed the law of Illinois and of Iowa, and also some laws that we have had in California, notably the Dupont Street widening Act, and also the act which provides for the testing of the validity of irrigation bonds before their issuance, to determine whether the proceedings have been strictly in accordance with law, and whether the bonds are valid or invalid. So the proposed draft is not



an entire innovation in that respect. We are simply trying to embody in this act the procedure which has been successfully at work in other States, and in California before the Constitution of 1879.

After the preliminary proceedings and the engineer has reported to the Council his estimates, the whole matter is to be submitted to the Court. Jurisdiction is obtained by proceedings *in rem*, and all parties have a right to appear before the court and make their objections. And then, after that is done, the Court enters its decree. If the town is satisfied with the decree, it can call for further action, or if not satisfied, it may let it rest there. If the town is satisfied, the decree is put in the hands of the Tax Collector in the shape of an execution, and the Tax Collector collects the money. The cash so collected goes into the fund, and, for those who do not want to pay cash, bonds are issued against the property, the bonds sold, and the money put into a fund, and if finally the bonds are not paid, the property is sold as under tax sale. So the fund is all ready for the contractor when the work is begun.

Right here I will call your attention to some objections that are urged to that part of the plan. In the first place, that procedure, exactly as it is stated in the draft and in the law of other States, is not constitutional in California, as our Constitution now stands. There are submitted to the court, under the draft as proposed, matters which under the constitution are exclusively in the hands of the municipal authorities. Other matters are submitted, which the court has a right to pass upon. So that, in order that the act as now submitted might be made valid, an amendment to Article XII. of the Constitution would be necessary. It could be made constitutional by a modification, reducing the number of points submitted to the court. Another objection raised is that it makes a lawsuit necessary in every street assessment case, and that it

gives the lawyers too much work, especially where the matter has to be tried at the county seat and the property owners have to travel a long distance. We propose to remove a part of that by allowing contests of that kind to be referred to a commissioner or referee, who shall hold sessions in the town where the property is located. But lawyers know very well what that means; a lawyer does not want his case referred to a referee if he is trying to be economical. But the idea of getting all the possible litigation out of the way before you go ahead with the work is certainly a good idea, one that has worked splendidly in other States.

Let me state to you some of the advantages and disadvantages of the cash proposition. The money is in hand when the bid is obtained. I have talked with some property owners who have objected very strongly to that. A good and substantial citizen of our city said to me, "Why should we pay our money into the treasury before the work is done? Suppose the work is not done properly; where is my kick?" I said, "You can enjoin the treasury from paying the money", and he replied, "That is not as good as having the money in my own pocket and telling the contractor, 'If you don't do the work properly, you don't get paid'." And there is considerable force in that argument. Again, in the case of large contracts, it would tie up a large sum of money for a greater or less time. Yet at the same time there is this large saving of  $33\frac{1}{3}$  per cent of the cost in the end. Under an honest and economical administration, with honest officials to handle the funds, the system would result in great advantage to the property holder; but, on the other hand, he would not have his "little private kick" as was expressed to me, against the contractor. And, although I do not agree with him, I do believe that the average man would rather have his street work cost him one-third more with the privilege and protection of a "kick", than to save

money without it; it seems to be human nature.

I have tried to deal the proposed draft as heavy blows as I could, to show the disadvantages, as they appear to us, as well as the advantages. Your committee can do no more than, as I said in the first place, report progress. Perhaps it might be well to refer the matter to some committee further and tell them to work over it, and perhaps not. It is for the convention to determine. We make no recommendation. The committee itself is divided. Some think it is a good measure, and some the worst thing that could be. I heard one man say yesterday in this convention that he believed the bill was inspired by the street contractors. (Laughter.)

Mr. Spinney of Fresno: I would like to ask, Mr. Chairman, whether the majority of the committee are in favor of or against the proposed draft? We belong to the class of cities that would be particularly affected by this, and so I would like to know how the committee stands.

Mr. Hutchinson: I believe the committee is about evenly divided.

Mr. Spinney: How are they divided as to the parts of the State represented?

Mr. Hutchinson: I think it is not a question of portions of the State. I think, however, that the southern part of California is rather more favorable to it than the northern part.

Mr. Devine; Mr. Chairman, they have a street law in San Jose that I think would be a good substitute for this proposed law, and I would like to hear it read, if there is no objection.

Mr. Partridge, of San Jose: I did not come here, gentlemen, for the purpose of offering the street improvement law which we have drafted in San Jose. But it is a fact that at an election to be held in February next, there is to be voted upon a street improvement law by way of an amendment to our charter, and it is one that we believe is as fair and just a street law as the people of San Jose could expect. We have pecu-

liar conditions there, and anything too radical by way of change would mean defeat to the amendment. The proposed amendment is so long that I would not attempt reading it, but I will state it to you in a briefer way.

It has been apparent to us that street work could be done much more cheaply than it is at present under the Vrooman Act. On the other hand, we were aware that we would meet with the objections that Mr. Hutchinson has set forth if we proposed collecting the money before the work was done. So we adopted, as near as we could, a middle course. We think the improvement suggested is not only a benefit to the property holder, but also to the municipality, and as well to the contractor.

After providing the usual preliminary steps, in the publication of notice, there is in every case a statement that bonds will be issued for all delinquent payments which amount to \$25 or over, the bonds to run against the property. Within ten days, any owner may file a petition of remonstrance, and at the next meeting of the Common Council, the Council fixes the time when these petitions will be heard. They are then heard and passed upon, and the Council's action upon them is final. So there is no delay, unless the Common Council sustains the objections made. After fifteen days, or after the remonstrance is filed or overruled, the Council has acquired jurisdiction to proceed with the improvement, and they pass an order of approval to that effect, in which they fix the bond of the contractor. Notice to bidders is then published for four days in a newspaper designated by the Common Council. In that respect, I want to say that in San Jose we have a newspaper under contract to do the city advertising by the year, and it costs nothing more to advertise something of this kind once a week than once a year. It means a great saving to San Jose. The bids are publicly opened, and the lowest bidder there declared. This does away with a difficulty under the



Vrooman Act, where after the bids have been opened and before the lowest bidder has been declared, some favorite will be allowed to change his bid. Then we proceed generally under the provisions of the Vrooman Act, with a provision to do away with the possibility of a ring among local contractors, which is that three-fourths of the property owners liable to be assessed may enter into a contract for the doing of the work, within ten days after the award of the contract by the city. When the work is finished it must be done to the satisfaction of the Common Council as well as the Street Superintendent.

As to the collection of the assessment when levied, after the preliminaries are all gone through with, the Treasurer publishes a notice that the assessment roll for the purpose of the particular street work is in his office, and that it must be paid by date given, which date must be sixty days from the first publication, and also that if the assessments become delinquent, property assessed to pay under \$25 will be immediately sold to satisfy the assessment, and property to pay \$25 or over, there shall be a bond issued to cover it. The bonds are made payable to bearer and are payable in five equal annual installments, with interest at five per cent., with a provision that the entire bond can be paid at any time that any installment becomes due, by paying the principal and interest to date and two per cent. additional on all deferred payments. If a default is made in the payment of any installment or of the interest, the holder can declare the whole sum due, and is entitled to have the lot sold to satisfy the same. That must be declared in writing to the Clerk.

The Chairman: The subject is so large a one, gentlemen, that I would like to suggest that we approach it item by item. In that way we can keep closely to a particular item in the discussion, and enable each one to express himself upon each point. For instance, the proposition of collecting assessments

in advance, and the proposition that the Court shall determine the matter of benefits and assessments beforehand, and the maintenance of street work for a number of years in succession:

Mr. Hutchinson: In order to carry out that suggestion and as a matter of form to bring it up for discussion, I will move that it is the sense of this convention that it is desirable to insert in the Act a provision which would result in the funds being collected before the contract is let.

Mr. Spinney: There is one difficulty with regard to cities of the fourth, fifth and sixth classes, as distinguished from the freeholder charter cities. There will have to be an amendment to our charter in reference to this collection of the assessment in advance.

The Chairman: I think that is a matter of detail which no doubt might be covered by the report of the committee.

Mr. Skillicorn, of Gilroy: We labor under the same difficulties that the gentleman says exists in Fresno. The question of what our charters are is important.

Mr. Pyne, of Healdsburg: It seems to me that the discussion of what the charter will do is easily settled; where there are freeholders' charters, they will govern. It is only in this class of charters that are under the Municipal Incorporation Act, which does not provide for this street work, that a general law like the one proposed will govern, and it is a question of whether it is preferable in these cases to collect the money in advance or to collect it afterwards.

Mr. Devine: It seems to me, Mr. Chairman, that the resolution now before this League would establish a bad precedent. Why should people pay for work in advance? I do not think any legislative body will entertain any such idea. I myself do not want to pay for work before it is done, and I do not think any other business man would.

Mr. Kincaid, of Redwood City: In my town we have had extreme difficulty

in getting any kind of street work done. We have not been able to find anybody who would take a contract. They are afraid of them. We are in favor of the money in advance.

The Chairman: We have only been able to get work done in Oakland under the Vrooman Act by running a bluff on the people, such as agreeing to pay for the curb, or half of the gutter, or something like that.

Mr. Kennedy of Chico: From the experience of Chico, I am in favor of the money being collected in advance. Replying to Mr. Devine, the work is not paid for in advance. The money is simply collected and held in trust, and it is not paid to the contractor until the work is satisfactorily completed. It is no more collected in advance than are your taxes to pay for the operation of the municipal government. It seems to me that this is simply using a prudent method and preparing yourselves to pay bills when they become due. We have a number of contractors in Chico, and there is keen competition between them on private contracts. But not one of them wants to bid on a municipal contract under the Vrooman Act; it is in bad odor with everybody. We last year twice advertised for bids in Chico under the Vrooman Act, and we did not receive a bid. I know that the work could be done from 30 to 35 per cent. cheaper if they knew that when they finished the work according to the contract, they would have no trouble in getting their money.

Mr. Devine: It is a great hardship upon poor people to have to go out and borrow money, and sometimes pay a high rate of interest on it, for maybe ninety days or six months. As I stated at first, I do not believe this proposition will ever be enacted into a law in this State.

Mr. Miner of San Jose: I want to ask some of the city attorneys if it is not possible to enact a double standard, giving the city the alternative of paying for the work before or after.

Mr. Hutchinson: That is provided for the Act that has been drafted.

Mr. Canfield of Chico: In answer to the gentleman from Sacramento, I really cannot see the hardship in having to borrow money for four months at 7 per cent or 8 per cent, when he can save  $33\frac{1}{3}$  per cent by paying it in advance.

Mr. Devine: I do not think there will be that saving.

Mr. Miner: From our experience in San Jose, we have found that there was at least  $33\frac{1}{3}$  per cent difference.

Mr. Devine: Why should there be that difference?

Mr. Miner: Because of the uncertainty of whether the contractor is ever going to get his money. In one case in San Jose, the lowest bid we got was 13 cents for macadam, and on the same piece of work let under private contract the rate was 9 cents.

Mr. Parker of Santa Cruz: It seems to me the main objection that has been advanced to the collection of the assessment before hand was stated by Mr. Hutchinson in his report, that people want an opportunity for redress. I would like to ask Mr. Hutchinson to what extent a party has redress after the Street Commissioner has reported favorably and the City Council or Trustees have approved work.

Mr. Hutchinson: He would probably only have an action for injunction, and would have to show cause in order to get any redress at all.

The Chairman: It comes pretty near to being conclusive then.

Mr. Hutchinson: Yes. You have have got to elect honest and efficient officials, or you cannot make it work at all.

Mr. York of Napa: I am personally in favor of the collection of the assessment prior to the actual performance of the contract. I would put the collection of the money after the letting of the contract, when the expenses can all be ascertained to a cent, and the fund necessary to be raised is known. If you collect the money before letting



the contract, you do not know what the amount of the contract is to be. But you could just as well let the contractor, and the contractor would feel just as safe knowing that the proceedings provided would absolutely raise the money before the work was done. Upon the question of litigation, there is this advantage, that it forces the property owner, prior to any work by the contractor, to show the invalidity of any proceeding that would affect the collection of the money. It is unjust and inequitable to allow the contractor to go on and perform his contract, and expend thousands of dollars, and afterwards learn that there was some technical mistake of the Council or of the official that upset the whole matter, so that the contractor cannot receive a cent for the honest performance of his contract. It has been said that the street contractor is not very scrupulous about keeping his contract. If so, it is the fault of the superintendent and Council. I do not think the street contractor is any worse than men in many other lines of business. And I do not think it is fair to keep him out of his money in that way. If the contractor knows that the money will be in the treasury to pay him when his work is done, you will get lower bids, there will be fiercer competition, and, with careful supervision, the work will be better done. It seems to me that possibly the better way with regard to this street law and the League, that it might be better to resubmit the matter to some committee. Then, with all the suggestions that will be made here, I am sure that a law can be drafted that will be of advantage to the municipalities of our State.

Mr. Finch, of Riverside: I would like to answer the suggestion of the gentleman that the contract be let before the money to collected. The trouble there is that you may run into litigation in your collection. A contractor makes a bid, and the assessment is made upon the basis of values today. Perhaps it is six months or a year before the con-

tractor can perform the contract, and values have changed during that time, and no contractor is going to put himself up to be cinched a year or so later in that matter, especially where the material is such a very large part of the contract.

Mr. Brock of Redlands: I am certainly in favor of having the money on hand in the first place. We have had difficulty in obtaining contracts for sewer work under a similar plan in our town. In fact, we had to advertise three times, and finally we got a bid through personal influence, and we know they charged us a great deal more than we should have been charged. But we had to have the work done. In these matters we have to protect both the taxpayer and the contractor, and that can only be done by having the money collected beforehand. But it seems to me that every objection is brushed aside when we have an alternative between the proposed plan and the Vrooman Act. Then the people can find out what is the best method.

Mr. Spinney: I am in favor, Mr. Chairman, of collecting the money in advance. I think the better method of doing that is to levy a tax every year for it at the same time that you do the taxes for other purposes. Then let the Board of Trustees determine where the work shall be done, and make a contract and go ahead and do it, and there is money in the treasury to pay for it.

Mr. Partridge: I want to say that if this discussion had come up two months ago, I would have agreed with these gentlemen that it was advisable to collect this money in advance. But I have been convinced that the idea is wrong, and for several reasons. In the first place, it is absolutely impossible, as the gentleman from Napa has said, before bids are received, to know exactly what your work is going to cost, and, as another gentleman has said, prices change, values fluctuate. We do not know today, when fixing the amount of assessment, just what the conditions will be

when he makes his bid, or when the work is ready to be performed. The proposition, so far as the fluctuation of values is concerned, is just as broad as it is long. But in addition to that, you do not know what it is going to cost before the contract is let, nor even when the contract is let. It is no common thing for contractors to find after doing some work that it is cheaper to quit than to go on, or to fail to perform their contract in any part. Then another contract may have to be let, and no one can tell what the prices will then be. I do not believe that any contractor bids  $33\frac{1}{3}$  per cent more merely because he is not sure of getting his money when the work is done. If you can make it manifest to him that he will get his money and without trouble to himself, that he will get it from the municipality and that the officials of the municipality will see that he gets it, and that if the parties do not pay him the money, the municipality will sell the property and get it in that way, while the bid may be a little more than it would be if the cash were actually in the treasury to pay him, I believe it would not be much more.

Mr. Pyne: The gentleman from San Jose has said exactly what I was thinking myself. But it strikes me that you must assure the contractor that he will get his money from the municipality, and that seems to be the weak part of the proposition. The difficulty of the Vrooman Act there is, that while he has a lien upon the property, he has to go to law to prove his claim; and it is the fear of that litigation that prevents him from bidding or compels him to bid high. I have done some contract work myself, and I have refused to bid under the Vrooman Act, and in doing private work, I have done it fully  $33\frac{1}{3}$  per cent less than I would have done the same work under the Vrooman Act. And it seems to me as a finality that the only way you can give the contractor the proper assurance is, practically, to collect the money in advance, thus

stopping all litigation.

On motion, duly seconded, the convention here took a recess until 2 P. M.



### AFTERNOON SESSION.

The convention was called to order in afternoon session at 2:20 P. M. by the the President.

Mr. Miner: Mr. Chairman, I am thoroughly convinced from the scope the discussion of the street law has taken, that it would be utterly impossible for this body to decide the questions involved. I therefore offer the following resolution:

"RESOLVED, that a vote of thanks be extended to the committee appointed to draft a new street law for their laborious task, and

RESOLVED, that the same committee be continued, with power to add to their number, with instructions to communicate with the various legislative bodies who are members of this organization, with the request that within two weeks they report to this Committee, stating their objections to the proposed amendments to the law as in its present shape. The committee shall take the reports, and, by giving the cities of the larger population the greater consideration, enact and have presented to the coming Legislature the result of the inquiries, in the shape of a concurrent street law."

Mr. Hanscom, of Berkeley, The only criticism I have of the resolution is that this League will be committed to a measure which they have never considered. The representatives have very grave objections to such an act being enacted in place of the Vrooman law.

The Secretary; You will notice that the resolution says an alternative or concurrent act.

After being duly seconded, the resolution was unanimously adopted.



## Report of the Committee on Legislation.

TO THE MEMBERS OF THE LEAGUE OF CALIFORNIA MUNICIPALITIES. GENTLEMEN: Your committee on Legislation desires to submit the following:

For the purpose of bringing the subject of needed legislation for the municipalities of California to the attention of this convention, we directed the Secretary some three months ago to communicate with the various city attorneys and to ascertain from them their views as to what new legislation was particularly needed for their respective cities and towns. The Secretary sent the communications as directed and in reply received a number of suggestions as to matters concerning which remedial legislation would be proper. These topics have been arranged on the program, that a discussion might be had of the various propositions. In several cases we have bills prepared as an aid to the discussion. Thus we have submitted an act to provide for a special tax for specific public improvements, a new municipal bond act and a new library law.

In the matter of disposal of franchises and the securing of revenue therefrom, we are in some doubt as to what will best meet our requirements in the shape of statute law; or whether it will not be necessary to present an amendment to the Constitution. We suggest that the matter be first discussed and then that a special committee be appointed to draft such measures as the convention appears to favor.

The same course may well be followed in respect to the other subjects which are upon the program.

In addition to the subjects printed upon the program, another matter has been brought to the attention of this Committee. It appears that cities of the 6th class have no authority to establish fire limits. It would be well to amend the charter for such cities by providing such power.

We would suggest the propriety of

amending the municipal elections acts by giving the Board of Trustees and Councils authority to reduce the number of election officers. Eight officers of election in each precinct is hardly necessary in municipal elections and is a source of considerable expense. It might also be well to ask for legislative permission to use ballot machines at municipal elections. These are being used at elections in Eastern states, and have been a pronounced success.

We would also ask your wishes in regard to the policy of again submitting a constitutional amendment to provide for the exemption of public bonds from taxation. While this amendment was defeated at the last election, the majority against it was not large. Were it to be again submitted, the subject again agitated, and by conducting an educational campaign the result might be favorable.

We believe that this League will prove a power in so shaping legislation, that ultimately the municipal laws of the state will be brought into harmony and order brought out of the chaos that obtains.

It also lies within the power of this League to be of valuable assistance to the members of the Legislature. By requiring all proposed new legislation to pass through the hands of this association, the result will be that the number of bills introduced in relation to municipal affairs will be materially reduced, and instead of the legislative committees having several bills upon one subject, which they will have to condense and harmonize, it will be possible to have only one such bill, which will already have been considered by municipal experts, and be in a shape for immediate action. Legislation will thus be facilitated and it will be possible to get such legislation as we need with very little trouble. Work of this kind can only be done through such an association as is this. At the same time we should be cautious as to what we purpose in the line of legislation. Do not let us con-

cern ourselves with trifles. The members of the legislature would regard us with disfavor were we to ask for time in passing laws that were not material to the welfare of their constituents.

In conclusion we would recommend that this League have a representation at Sacramento during the session, that matters in connection therewith may be properly attended to.

Respectfully submitted,

E. K. TAYLOR, chairman.

THE SECRETARY—In addition to the foregoing I am in receipt of resolutions from the Board of Trustees of the City of Riverside, requesting legislation as follows:

TO THE LEAGUE OF CALIFORNIA MUNICIPALITIES, SAN FRANCISCO, CALIF. GENTLEMEN:—We desire to suggest that you take whatever steps may seem advisable to you to bring about the passage of an Act by our State Legislature giving municipal corporations the power to compel property owners to eradicate weeds and other objectional growths from the sidewalks in front of their property. That if such work be not done by the property owner the municipality be empowered to do such work and collect the cost from said owner.

We would suggest that the method prescribed for doing said work and collecting said cost be as simple as possible.

We also suggest as advisable the passage of a law giving municipalities power to levy all or a part, at their discretion, of the cost of street sprinkling on a district or on a street frontage.

In a city with extended territory it is impossible to properly sprinkle all streets without bankrupting the City Treasury. If the cost of sprinkling be raised by private subscription, there are always many property owners who refuse to subscribe and yet who receive the benefit of the sprinkling. This is not equitable. The law recommended above would remedy this inequality.

C. R. STEBBINS,

Clerk of the City of Riverside.

Mr. Miner: In regard to the Weed Ordinance, Mr. Chairman, I do not know anything that is more of a common sense measure than that. I certainly hope that it will be adopted.

Mr. Kennedy: Mr. President, upon this question of needed legislation, there is one subject that applies particularly to cities of the fifth class, and that is the subject of acquiring water works. As the law now stands they cannot go to an expense of more than \$10,000 for that purpose. That is practically prohibitory, and I think that it should be repealed, so that a greater expense might be incurred.

The Chairman: If there is no objection, the Secretary will add Mr. Kennedy's suggestion to the report made.

Mr. Pyne: I suggest that the convention now take up the discussion of subjects of needed legislation, without definitely acting upon the report, because the report and the subjects appearing upon the program are so intermingled, and, moreover, it appears that some bills have been drafted covering these several heads. I think the better plan would be to discuss these subjects and then to adopt the whole report of the committee.

The Chairman: If there is no objection we will so proceed. And, as the Secretary is in touch with the thought and suggestions from which these subjects come, we shall be glad if he will enlighten us as the different matters are reached.



### Amendments to the Municipal Bond Act.

The Secretary: There has been a general demand on the part of city officials for shorter term bonds. Under the present law there is but one class provided for, namely, those running for forty years. Municipalities frequently make improvements and desire to pay for them in a shorter time. Moreover, as the present bond act is a most complicated statute and it has been thought



wise to propose an entirely new act rather than an amendment to the old one, simplifying it very much. I have known of thousands of dollars being lost just because of some slight technicalities in the proceedings, bidders not being willing to take chances upon them. So I have had drawn a new and extremely simple act, which I will read. (Reads the act). It will be noted that under the provisions of this act the present enormous cost of publication will be very largely done away with.

Mr. Coffman, of Healdsburg: It occurs to me to suggest, Mr. Chairman, that it be provided in the act that the legislative body of the municipality be required to determine the period of time for which the bonds shall run, but that it shall not exceed forty years.

Mr. Partridge: I think there should be added a provision that for any purchase of apparatus, such as fire apparatus, bonds may be issued as well. Fire engine are very expensive things, and it often occurs that large improvements are needed in that direction, and, where the charter limits the levy, it is practically impossible to bring it within the limit.

Mr. Miner: San Jose is just in that predicament. There is nothing more essential than fire protection, and yet our tax limit practically precludes the improvement.

The Chairman: Mr. Mason thinks that can be added, and he will add it.

Mr. Hanscom: Berkeley has just passed through the experience of voting \$150,000 of bonds, and that experience may be of some little value to you here. The expense of the election was very heavy, and I think that an amendment that would reduce those expenses and not in any degree impair the validity of the action, would be a decided improvement. I think, however, the less we try to tinker with laws that have already been interpreted, the better off we shall be. Under the present law we sold our bond issue without any difficulty whatever, receiv-

ing such a premium that the purchaser netted an interest of less than 4 per cent. I agree that the period of payment for the bonds should be changed in the way suggested. Of course, the time the bonds have to run will determine to some extent their market value, as ordinarily the buyer buys for investment. But the town should have the privilege of acting as they see fit in that direction. I think the act as proposed by the Secretary would be a very decided improvement.

Referred to the Judiciary Committee.

[NOTE—The Judiciary Committee on the day following reported the bill back with amendments, and recommended that it be approved and presented to the Legislature. It was so ordered.]

### **The Consideration of a Measure Providing for a Special Tax for Specific Public Improvements.**

The Secretary: We have a bill upon this subject, too, drawn in response to a general demand of cities to be permitted to levy an additional tax to the amount permitted by law in their charters, for the purpose of making any specific improvement that ordinarily would not be the proper subject of a bond issue. I think the fire engines would come under this head. (Reads bill.) There are a great many towns that want to adopt a system of street works covering over a period of years, and paying for the same out of the municipal funds. This would provide for that. Other cities want to build a bridge to cost \$4000 or \$5000, or purchase some fire engines, or a fire alarm system, and desire to pay for it on the installment plan. This bill would permit their making such improvements.

Mr. Moors of Red Bluff: The City of Red Bluff has found that the installment plan, as suggested, has worked very well. Our people are all satisfied with what we have done in the way of street work and other work within the

past two years. We have received compliments on all sides for what has been accomplished. We did it, however, by raising our tax rate from 65c to the limit of 75c.

The Chairman: We find it difficult with the dollar limit in the City of Oakland to do many needed things, and the difficulty would be obviated by just such a measure as is here proposed.

Mr. Partridge: There is one proposition there embodied that I confess I am not clear on, and that is whether a general statute of that character, authorizing a special tax, would be of any use whatever in municipalities where the tax levy is fixed by freeholders' charter at a maximum rate. I have some doubt upon that.

Mr. Hutchinson: That is done by all the bond acts now.

Mr. Partridge: Yes, but there is a special provision in the charter covering that, and that is a different proposition.

Mr. Keegan of Santa Rosa: I think, Mr. Chairman, that there is only one way for the charter cities to increase their limit, and that is by amendment to the charter. That would obviate the whole difficulty.

Mr. Miner: Suppose you come down and try to carry an election with us upon that theory.

Mr. Keegan: The general law suggested by the gentleman would not relieve you. If you have a charter provision establishing a limit, I do not see how a general law can help you out.

Mr. Pyne: Whatever is the fact with regard to the freeholder charter cities, this would certainly be a most excellent plan for the others. Cities with freeholder charters can relieve themselves by amendment, but cities of the fifth and sixth class will require some such general legislation as this before they act. There are many items that are not large enough for the creation of a bond issue, and this would cover them.

Referred to the Judiciary Committee.

[NOTE—The Judiciary Committee on the day following reported the bill back with amendments, and recommended that it be approved and presented to the Legislature. It was so ordered.]

### **The Collection of License Taxes in Municipalities by County Authorities.**

The Secretary: This subject was before the convention last year, but not exactly such shape that we could handle it satisfactorily. Since then your Secretary has obtained some information and data as to the collection of license taxes by municipalities. I find that there is a large number of cases where the county authorities levy an indiscriminate license upon pretty nearly everything, which is collected from the business men, and the municipal authorities also levy a license.

The municipal authorities complain that the county authorities get the most of it, and that the city has to take what is left. It seems to me that this double system of imposing licenses is an unfair one. The problem, however, is not general. In some counties no attempt whatever is made on the part of the county authorities to collect licenses in the cities, while in some others the counties only collect saloon licenses. So just how to approach the subject, I do not know. Those who have particular grievances might state them.

Mr. Hale of Martinez: The fundamental idea of levying a license in addition to a tax paid by a man of business, is because that man requires certain protection not required by people owning other classes, such as sprinkling and police protection. Who is it that pays street sprinkling and police protection? It is the municipality. Why should that license be collected by the county, when the municipality pays the expenses? In our county there is quite a heavy license levied on all business conducted within the county that within the incorporated towns as well as unincorporated towns. We are



laboring under the same difficulty that the majority of you are—we are short of revenue. But we cannot in justice to our merchants, put a reasonable license tax upon them, for the reason that they are already paying as large a license as their competitors in unincorporated towns. If the conditions were that no county license were imposed, the town could impose a license equal to that imposed by the county, and our business would not have any greater burden than those outside. It is only just and right that the county should be prohibited from collecting licenses in the municipality. I understand there has been some objection made to this, upon the ground that there might be some indiscrimination. If it is contended that the municipality might levy a different license from that levied by the county, there might be something put in the act which would require the municipality to levy a license at least equal to that levied by the county.

Mr. Miner: I do not think the county should levy a license in an incorporated town at all.

Mr. Spinhey: This is a State law, which requires the Supervisors to collect that tax, and the only way out of it is to repeat that law.

Mr. Kennedy: I agree with the gentleman who has preceded me. For instance, in Chico, Butte County collects licenses from the saloons amounting to \$7800 a year. On the other hand, the town receives about \$800, and it is impossible to tax them higher. So it amounts to the county taking the money and the city paying for the police protection. I think it is very desirable that a law should be adopted taking away the power of the county to levy a license within incorporate limits. With us the effect of that would be that the city could at once levy a license equal to the two licenses upon saloons, and we would have more money to build public improvements.

Mr. Hale: I understand that in Alameda County the Supervisors are in

the habit of exempting business men from license.

The Chairman: We at present in Oakland receive from \$85,000 to \$88,000 per annum from the saloons, and now it is proposed that the County Board of Supervisors take upon themselves the authority of licensing the same saloons. We have about all we can do to keep within the dollar limit now, especially with a decrease in the assessment roll. We over there think that this is a particularly pertinent subject for legislation, and we commend strongly that the County Government Act be amended along the line of suggestion already made.

Mr. Miner: I would like to inquire what the State law is that permits the Board of Supervisors to levy this tax.

Mr. Kennedy: The State gives the County authority to tax each and every kind of business, and also gives the municipality authority to do the same. The authority is co-extensive. But if we were to raise our saloon tax in Chico to the amount charged by the county, every saloon in town would move just outside the corporate limits, and we would have no tax for it all.

Mr. Partridge: It seems to me that there is a remedy for the town of Chico. The Constitution of the State grants authority to both counties and cities to make and enforce within their own limits local police, sanitary and other regulations. I am inclined to think that licensing the saloons to that figure is in the nature of a police regulation, and if so, our Supreme Court has decided that where the police regulation of a municipality and that of a county conflict, that the county police regulation is of no moment inside the city limits. But, however, that may be, it seems to me that it would be an easy matter to adjust this thing by a mere amendment to the County Government Act by way of proviso, that license shall not be levied or collected by the county authorities upon any business within the limits of an incorporated

city or town. I offer it as a motion, that it is the sense of this convention that the County Government Act be amended in that particular.

The motion was unanimously carried, and the matter referred to the Legislative Committee.

**Should the Marshal (or Any Other Officer)  
Be Elected by the Board of Trustees  
in Cities of Fifth and Sixth  
Classes?**

The Chairman: It may not be known in this connection, that cities of fifth and Sixth class far outnumber those of any other class in the convention. So this question should be of particular interest.

Mr. Moors: I think Mr. Chairman, from our experience, that the Marshal and Trustees work in harmony better when the Marshal is selected by the Trustees. We have found that to be so. Under the old regime, when we had a contrary Marshal, we soon got another. But since we have been under a new charter, with the Marshal elected, there has been one continual clash. It seems an injustice to have the Marshal elected by the people, and then hold the Trustees, not receiving a salary, responsible for his acts. We make an ordinance, and then we find it hard to carry out—the Marshal would sometimes refuse point blank to carry it into effect. With us he is paid the salary of \$90 a month, and he stands in with a class of people who want a wide open town, and the consequence is that when we come to an election he is sure of election. The result of it all is, that our ordinances are oftentimes void and not worth anything.

Mr. Spinney: Haven't you ordinances defining his duties?

Mr. Moores: Our Marshal has been on several sprees, until finally we told him it wouldn't do. Then he gat on a big spree and threatened everybody, we had him arrested and fined \$40. He

began to be arbitrary and insulting again, and we went before the Grand Jury and had him indicted. But we never can convict him. I think it is a great mistake that the power of appointment and removal is not in the Trustees.

Mr. Spinney: I do not think the plan will work in the majority of instances. Suppose I say to a Marshal appointed by our Board, "This is my friend," and the Marshal feels he will have to do as I say. I think it is better to let him be elected by the people. He is obliged by law to do his duty, and if he doesn't do it, you can impeach him out of office very quickly. Another thing: If he does anything wrong, if he is elected by the people, the Trustees will not be blamed for it. The clerk ought to be elected by the Trustees, but not the Marshal.

Mr. Pyne: I agree with the gentleman from Red Bluff. Our present Marshal is as good a man as we could possibly get, but I have served upon Boards of Trustees when we had more or less trouble all the time. So far as impeachment goes, it is almost impossible to impeach an officer. If the Board appoints the Marshal, and he refuses to carry out an ordinance, we can say to him, "We will get somebody who will." I think the same logic applies to the Clerk. There is only one objection to the appointment of the Clerk. I am not familiar with charters of the cities of the fifth class, but in the sixth the Clerk is ex-officio Assessor, and it might not be policy to change that so that the people would not elect their Assessor.

Mr. Spinney: The Clerk is not Assessor in cities of the fifth class.

Mr. Kirkbride: I will say in reference to this matter, that in the replies of the municipalities sent to the Secretary, as printed in the CALIFORNIA MUNICIPALITIES, I notice that there are more points made upon that subject than any other. And I will say that my people instructed me to do what I could to se-



cure legislation looking toward the appointment of the Marshal, because we have had a great deal of trouble in that connection. I also agree that the City Clerk should be appointed, because the Marshal and Clerk are city officials under the Board of Trustees, and there should be harmony between them all around, instead of not only opposition, but even lukewarmness. The making of the Clerk ex-officio Assessor and the Marshal ex-officio Tax Collector of course involves an objection to such a change. But that might be obviated by making the Assessor and Tax Collector the same official in small towns. Their duties do not differ, in my judgment. There is no more reason for the election for the Marshal than there is for the Chief of Police.

Mr. Kennedy: For argument's sake, let us look at the Marshal's side. The first question that presents itself is, who is the better judge of the man for Marshal, the people or the five Trustees? It seems to me that the body of the people is the better. The Trustees, being the legislative body, may perhaps wish to override their powers. The only balance placed upon them is the Marshal. He is the executive, the person to whom people look up, in towns of fifth and sixth classes. He has as much right to his ideas of what is right and what is wrong as the Board of Trustees, and I think he ought to be a free and independent man, able to act upon his own judgment and be accountable to nobody but the people who elect him.

Mr. Riggin of St. Helena: I merely wish to say, Mr. Chairman, that this matter was talked over by the Board of Trustees of St. Helena, and it was their feeling that, instead of putting the Marshal under the control of the Board of Trustees, it would rather tend to bring the Board of Trustees under the control of the Marshal and result in a whole lot of wire pulling.

Upon roll call of cities of the fifth and sixth classes, the vote stood as follows:

Favoring appointment of Marshal, 15  
Against such appointment, 12.  
Favoring appointment of Clerk, 15.  
Against such appointment, 12.

### **Should Jury Trials Be Abolished in Cases of Violation of City Ordinances?**

Mr. Miner: There is nothing that appeals to me as being more important. I think no greater farce has ever been enacted than that a municipality should call a jury together for a little misdemeanor. It is a shame that such a thing should exist. If a Judge does a man wrong in finding him guilty of such minor offense, he has his redress by appeal. We had a case a few days ago in which a jury was brought together to see whether a man kept his saloon open in violation of a city ordinance. It was a flagrant fact that he did, known to everybody in town, yet after three or four days of trial, the jury brought in a verdict that the ordinance was unconstitutional. It does not take twelve men to determine whether or not a man is drunk, or whether he hit John Smith. I move that it be the sense of this convention that jury trials be abolished in this State in cases of violation of municipal ordinances.

Mr. Braunhart of San Francisco: I do not desire, Mr. Chairman, to make the statement that I am opposed to the proposition as stated by the gentleman. I simply desire to say that a bill of this kind was introduced at the last session, a bill to abolish jury trials in the case of ordinary misdemeanors. There was a strong opposition immediately developed, not only on grounds of policy, but also upon constitutional grounds. I am not a lawyer, but I venture to say that such a matter is unconstitutional. Moreover, I think you will find that your representatives from all over the State greatly opposed to it. Justices of the peace and Police Judges are but men, and in some instances it may be be conceived that the chief idea of the prosecution is for the purpose of collect-

ing fees from the county. If I were a member of the coming legislature, as I have been in the past, and the right of trial by jury were attacked in this way, as I view the matter now, I should certainly vote against it.

Mr. Partridge: So far as constitutionality is concerned, Chief Justice Beatty has stated in an opinion rendered by him that the matter of the trial by jury for city misdemeanors could be dispensed with. That is a very high opinion. So far as desirability goes, I think any prosecuting attorney will bear me out when I say that jury trials in these cases are absolutely farcical. The bill that Mr. Braunhart speaks of went beyond the question of city misdemeanors, I think, and included all misdemeanors.

Mr. Braunhart: That is correct.

Mr. Partridge: There are some State misdemeanors that were misdemeanors at common law, as to which it would be unconstitutional to take away the right of trial by jury.

Mr. Miner: Suppose a corporation violates a city ordinance. The objection urged here has been in the case of drunkenness or violation of a sidewalk ordinance. The Judge might be an employe or tool of the corporation. Then the danger would be great on the other side.

Mr. Kennedy: I think a jury is a very great nuisance to a prosecuting officer, but I think the measure proposed is to sweeping. I hesitate very much in saying whether I would be in favor of taking away trial by jury at all. I know I would not in any case where the fine or penalty imposed was more than \$25. Prosecuting attorneys and Judges of have an idea that the minute a policeman arrests a man, he is guilty. The subject is a dangerous one to tackle. Public opinion has much to do with the verdicts of juries. I will dare say that there must be in San Jose a large majority against the ordinance referred to, or the jury would not have brought in the verdict mentioned.

Mr. Miner: I will venture to say that in nine cases out of ten where a man is brought before a jury for trial in the City of San Jose, and I presume it is the same everywhere else, there should be a conviction, and there would be only for the sympathy of the jury, or the appeal of the attorney made to work upon the feelings of the jury. It has made the police courts in their administration of justice a farce.

Mr. Braunhart: You object to the trial by jury because the jury does not convict.

Mr. Miner: I think the jury does not convict in many cases where there is palpable guilt. The purpose of this proposed legislation is to accomplish that which has not been accomplished—to secure convictions in these petty cases of violations of city ordinances, where there is guilt.

Mr. Partridge: In other words, we desire to have the law enforced, instead of having it made a farce as was done in the case of the jury bringing in a verdict of unconstitutionality.

Mr. Parker: In the little experience we have had in Santa Cruz, we have found in the case of Justices of the Peace that we were quite as likely to have a farcial result as with a jury. And when it comes to buying a jury, you have more men to buy. I think a man should always have a right to demand a trial by a jury of his peers.

Mr. Kennedy: I would like to ask the City Attorney of San Jose if it is not a fact that a request to dismiss an action made to a police judge there results in the dismissal of the action.

Mr. Partridge: I have to say with reference to that matter that I have never made such a request, and I do not know.

Mr. Kennedy: I find that in almost every instance the judges of police courts and justices are not attorneys, often not even learned men, and his judgment is not good in every case. So I think it would be unsafe to take a man's liberty in such a case as that.



where the punishment might extend to \$300 fine or 300 days, without the right of trial by jury.

Mr. Partridge: I want to say from the information of the gentleman that I have been prosecuting criminal cases for about twelve years, doing nothing else for the larger part of the time. I have found with a very few exceptions, that an innocent man need not be afraid to submit his case to the mind of the judge; that, with very few exceptions, there have been no innocent men punished. On the other hand, I have seen thousands of guilty men escape conviction by the mere expedient of getting one man on the jury who would insist on finding the accused not guilty. It may be perhaps be too radical a departure from the old system that has been in vogue for centuries to abolish the system entirely. But in my judgment there should at least be a provision that the verdict need not be unanimous, as it is now. Our ordinances are passed, and we cannot enforce them. The prosecution has no right to appeal, so that if the man is acquitted the case is ended, while on the contrary, if he is convicted he has an appeal. If he gets a new trial in the Superior Court on appeal, he has a right to a jury trial there. So it seems to me he would be amply protected if the present rule of a unanimous verdict were modified.

Mr. Coffman of Healdsburg: It seems to me that the City Attorney of San Jose has hinted at the proper solution of this matter. Instead of abolishing trial by jury, I think it would be better to deprive the accused of the hope that he may prejudice some member of the jury, and thus save himself from conviction, by requiring only a two-thirds vote of the jury to convict. I offer as a substitute for the present motion that it is the sense of this convention that such legislation shall be enacted as that a vote of two-thirds of the jury may produce a verdict in the case of violation of a municipal ordinance, and that it be referred to the Legislative Committee.

(The notion was put and unanimously adopted.)

### A New Public Library Law.

Mr. Kirkbride: I will state in reference to the subject of a new Public Library law, Mr. Chairman and Gentlemen of the Convention, that this matter was first brought to my attention some two years ago, upon having occasion to look into the establishment of a library in our town. The present library Act is the general law of 1880. When I had occasion to examine that law, I found it had been drawn very crudely, conflicting with other State laws and with the decisions of our Supreme Court in many respects. I attempted to obviate these objections by the preparation of a new act, which was before the last convention of this body, and it was introduced before the Legislature two years ago. Unfortunately, however, it was introduced late in the session, and was referred to the wrong committee. I corrected that, but it only passed to its second reading, on account of lateness of the session. There have since been many articles by Mr. Kimball of San Francisco in CALIFORNIA MUNICIPALITIES, that are very valuable. Mr. Kimball seems to know more about the libraries throughout the State of California than any other man in the State investigating the subject. Suggestions of his have been added to the act which I shall present to you, which makes it better than the act presented two years ago, although it is generally substantially in line with that act. It may be said that many of the city charters provide library provisions, so that this act would not apply. That is true, but many charters have no such provisions, and all of these municipalities organized under the general act should have some such legislation. The act provides for an extension of some powers of the library. We have compared our act with that of Massachusetts, which is ahead of all other States in the Union, and

have endeavored to cover the good points of the Massachusetts law. While many of you Councilman and others may not have the question of libraries at heart, nevertheless, I want to say to you that it is one of the questions upon which modern municipalities are legislating very strongly. They are favoring the library and the library movement. In the State of California, even, we find that the library growth is simply marvelous within the last few years. I think we should endeavor, without burdening our people, to give them as large powers as we can in order to accomplish the purpose of building up the municipal library.

Mr. Spinney: Is there not a law providing for trustees being elected by the people?

Mr. Kirkbride: That is in cities of the fifth class.

Mr. Spinney: In our town we expended about \$3000 for our library and turned it over to the school trustees.

Upon the suggestion of Mr. York, the matter of "A New Public Library Law" was then deferred until a later time in the session, and an adjournment was taken until Friday, December 14, 1900, at 10 o'clock A. M.

[NOTE—Later the matter was again presented and the proposed act referred to the Legislative Committee].

### THIRD DAY.

FRIDAY, DECEMBER 14, 1900.

The Convention was called to order at 10 o'clock A. M. by the President of the League.

The Chairman: If there is no objection, the Convention will first proceed to the consideration of recommendations contained in the report of the Legislative Committee. The Secretary has tabulated the subjects, and will introduce the matter, which he is able to do by reason of his familiarity with the subject from correspondence held during

the year. We will hear from the Secretary.

### Fire Limits in 6th Class Towns.

The Secretary: The first suggestion is that of giving cities of the sixth class authority to establish fire limits. The charters provided for cities of that class do not give such authority. The city of Los Gatos attempted to do that several years ago, and a decision was rendered that they had no authority to do so under their charter. The city of Merced had a similar experience. The Legislative Committee has reported that they see no objection to introducing a law that will enlarge the powers of the cities of the sixth class, giving them power to establish fire limits. Some of our cities of the sixth class have eight or ten thousand inhabitants, and I cannot see any objection to the proposition.

On motion of Mr. Hutchinson, seconded by Mr. Miner, it was resolved that the League approve an act to that effect.

### Municipal Elections.

The Secretary: Another suggestion made by the Committee on Legislation was, whether or not it would be proper to amend the municipal elections law by giving the legislative bodies of the cities authority to reduce the number of election officers in the various precincts. The law now requires that there shall be eight election officers, and there hardly seems to be work for that number. It would be a considerable saving if they could reduce the number to four or five or six. And also the suggestion as to whether or not the cities might not well be given authority to use ballot machines for voting, and start an experiment, perhaps, along that line.

The Chairman: May I be pardoned, gentlemen, if I say that it seems to me we have a most excellent election law.



and in our attempt to change it, the result might be disaster. The legislative body really fixes the compensation of the officers, and they can keep down the expenses in that way. The work is not very onerous, and the amount paid for the same could well be reduced.

Mr. Jaensch of Napa: We only pay our election officers \$5 a day, whereas the county pays \$10. So we produce the same result, as suggested by our chairman.

Mr. Hutchinsom: I approve fully of the remarks of the chairman in this matter. It seems to me we had better not attempt to meddle with the election law. As the Chairman says, the expenses of an election are regulated by the trustees, and I do not see that any great harm from the law as it is now, even upon the question of expenses. We can consolidate two precincts into one and meet the objection in that way.

Mr. Bayley: I think, too, that the expenses can be reduced, and particularly by the consolidation of election precincts, without tampering with the law as we have it now.

There being no objection, the proposition was passed without action.

### **Exempting Bonds From Taxation.**

The Secretary: The next suggestion by the committee on legislation is that to get the sense of this Convention as to whether another constitutional amendment exempting public bonds from taxation should be re-submitted to the people. At the last election, that amendment was defeated, but the majority against it was not very large. The committee suggests that by re-passing the amendment and a re-submission of it to the people, an educational campaign might be carried on so that the amendment would carry.

The Chairman: The thought is that the Legislative Committee of this League should take this matter up, to

the end that the Legislature be encouraged to re-submit the constitutional amendment.

Mr. Miner: I believe that the amendment in question was one of the most valuable amendments voted on at the last election. I think it was defeated more on account of people not understanding it than for any other reason. There is no question in my mind that if the thing was taken up by this League and an educational campaign carried on, the amendment would carry very easily.

Mr. Chairman: I do not know that the League took any action upon the measure last year.

Mr. Miner: Yes, it did, but it was overlooked during the campaign. I therefore move that it is the sense of this body that the constitutional amendment in relation to the exemption of municipal, county and state bonds from taxation be re-submitted to the people.

Mr. Devine: Mr. Chairman, I would like to have some member explain wherein is to be derived the benefit to the people from such an amendment to our Constitution. All classes of visible property are taxed. Are we going to create a special privilege for men who do not improve their property, who do not engage in manufacturing and build up cities? Is the man who invests his money in manufactures and real property to defray all the expenses of the Government? I believe it would be a very bad precedent to submit a proposition of this kind to the people. They have wisely rejected it.

Mr. Skillicorn: The gentleman from San Jose has given just the right view regarding municipal bonds. In our city they issued bonds to the extent of about \$16,000 to build a new school house. I presume fifty letters were received from eastern cities from people willing to take those bonds, and offering a good premium for them, but they could not be sold in California. Under the law as it now exists, the eastern people grab our bonds and get all the benefit, instead

of the money remaining in the state, simply because in other states they do not tax their bonds.

Mr. Jaensch: In this connection I want to say that we issued bonds to the amount of \$27,000, and we pay \$2,000 every year in interest, every bit of which goes east. If this proposition were carried, the banks in our town would get that money, that interest, and the money would stay in California, and be in circulation here, whereas now it all goes out of the state.

Mr. Miner: I do not think the gentleman from Sacramento is cognizant of all the facts or he would be with us upon this proposition. I believe it is a fact that there are not held in California any of our municipal bonds. The reason is that they would have to be returned for taxation, and tax is paid upon them, if here. If our own people could take them up, it would be very advantageous to us here. As it is now, it is not exempting anything from taxation. What is proposed is really to exempt yourself from taxation, giving you permission to float your bonds at home at a lower rate of interest by about two per cent per annum.

Mr. Toll, of Los Angeles: We have found in our experience in Los Angeles that if we wanted to vote a small issue of bonds, that we have been unable to place them in the local market, because, eastern money being cheaper, and our people being unable to take the bonds and pay taxes, it would be a loss to our people. I should think this objection would be particularly true when it comes to small sections of the country, with their small bond issues. They are compelled to go through with all the machinery of encouraging eastern buyers to come in and take their small issues. For instance, in Los Angeles we can borrow money at three and three-quarters per cent, whereas in the smaller towns they have to pay perhaps five or six per cent, because eastern people do not compete so much for them—they do not care to be bothered to

take a small issue. So the present law is a great injustice to the people living in the smaller cities.

Mr. Maher, of Santa Cruz: In this connection, the City of Santa Cruz, in issuing bonds to the amount of \$300,000 about twelve years ago, found her citizens compelled to take up \$30,000 of those bonds to buy rights of way and water rights and start the work going, and all the rest of the issue went to New York city, because on those \$30,000 that our own people took, they were taxed, while on the \$270,000 that went east there was no taxation. I am sure that it will be of benefit to the state if such a constitutional amendment can pass.

The Convention unanimously adopted Mr. Miner's resolution.

### Water Works in 5th Class Cities.

The Secretary: Mr. Kennedy, of Chico, yesterday suggested that in 1895 a law was passed which operated to prevent cities of the fifth class from acquiring water works. I happen to know something of the history of that legislation. It seems that some city in the state, I think Fresno, wanted to acquire its own water works. By some means or other, the Legislature at that critical moment passed a law, ostensibly for the purpose of giving cities authority to construct and operate water works, cities of the fifth class, but there was a joker in it, and that joker consisted of a proviso limiting the incurring of indebtedness or the expenditure of any money in excess of ten thousand dollars. The authority to construct water works already existed, and still exists. So the bill itself served no purpose whatever except to fix the rate so low that it put it out of the power of such cities to secure their water works. This difficulty can be very easily settled. I therefore move that this matter be referred to a committee to consist of Mr. Kennedy of Chico and your Secretary, to look up the law, and, if necessary,



prepare a bill to correct the difficulty, that committee operating in conjunction with the Judiciary Committee.

The motion prevailed by a unanimous vote.

### **Weeds and Street Sprinkling.**

The Secretary: We have next the suggestion from the City of Riverside that there be some legislation to give them authority to eradicate weeds, etc., from sidewalks, and also one which would permit them to do street sprinkling and charge part of the cost of that against property owners fronting the street.

The Chairman: Those who are familiar with such things will recognize these as two distinct propositions. I think there is an act permitting the removal of weeds from sidewalks, which is a tree planting act as well. I am informed by citizens of Berkeley that an attempt to improve their streets under this act proved it to be an unconstitutional act.

Mr. Skillicorn: In the city of Gilroy we have an ordinance which says that property owners shall remove the weeds from the sidewalk. Our City Marshal carries out the law to the letter. If the property holder fails to remove the weeds, after a certain time the Marshal has it done and charges it to the property. I do not know whether the law is constitutional or not, but it seems to act very well down there.

The Chairman: How does he collect it?

Mr. Skillicorn. From the property owners direct.

The Chairman: Suppose the property owner was in London.

Mr. Skillicorn: He has never failed to collect it in a single instance.

Mr. Hutchinson: The people of Palo Alto met with some difficulty in this direction, and they copied the Gilroy ordinance. We have realized that it is not constitutional, and have not pushed it very far. The ordinance gives notice that the owner must clean out the

weeds, or the Marshal will do it at the property owner's expense. When it comes to the non-resident property owner, if he does not pay, it has at least operated as a bluff.

Mr. Kenedy: In Chico two years ago we had a most excellent Superintendent of Streets. When it became necessary to get the weeds cleaned out, he would notify the property owner to build a new sidewalk entirely, which of course raised a great deal of objection. Then he would promise that if he would clean up the sidewalk, he would withdraw the notice. That worked very well until we got a new Superintendent of Streets who would do nothing. But I do not think the law was constitutional.

Mr. Devine: We have a different sort of a bluff on the property owners. We notify them to clean up the weeds, and if they fail to comply with it, we arrest them and take them down to jail.

Mr. Miner: It seems to me that the best way is to make it a health measure. That will make it both legal and constitutional. It seems to me we ought to find something that will show that weeds are unhealthy.

The Chairman: Either that, or that that they are a nuisance.

On motion the matter was unanimously referred to the Legislative Committee.

Mr. Riffin, of St. Helena: In connection with this matter, I would like to state that we have several ordinances in our town declaring that certain work shall be done and constitute a lien upon the property, such as sewer work. Could such a lien be enforced against the property? The same reasoning would hold here as would obtain in the case of the weeds ordinance.

The Chairman: The question of sewers would be a health matter entirely. We had an experience with reference to street sprinkling that would come within the same line. We are sprinkling the streets in the city of Oakland at an expense of \$50,000 a year out of

the City Treasury, because a non-residents property can hardly be taxed, under our methods over there, under any law that we know.

The Secretary: I can state a little history upon this subject of street sprinkling. Two years ago at the Legislature, a bill was introduced at the request of the city of Marysville which provided for street sprinkling and assessing the cost therefor against the property owners according to the front foot principle, somewhat after the manner of the Vrooman Act. That Act was looked over by the Committee on Legislation at that time. We had a special session of the League at Sacramento during the session, and, after suggesting a number of amendments to the bill, its passage was recommended. So we have a foundation to work on if the same matter is again recommended.

Mr. Skillicorn: I think, Mr. Chairman, that if the City of Riverside desires that matter referred to the Legislative Committee, it ought to be done. We do not sprinkle all the streets down our way. Most of our taxes come from the main street, but we are all the time having complaints from the side streets that pay very small proportions of the taxes, that their streets are not sprinkled, too. If those people want the streets sprinkled, I believe there ought to be a law permitting the municipality to collect part of the expenses from them in taxes.

On motion of Mr. Hutchinson, seconded by Mr. Toll, the matter was unanimously referred to the Legislative Committee, and that the League favor the passage of such a bill, action by the municipality to be optional, however, and not mandatory.

### City Justices.

The Secretary: Another matter that has been brought to my attention this morning, and which was also embraced in the report of the legislative committee, is that in some of the larger cities, excluding San Francisco, the salary of

the City Justice of the Peace who acts as police judge, \$2,000 per annum, is paid by the city, whereas all fines arising from criminal cases within his jurisdiction or in his court are paid into the county treasury. In other words, the city pays for the work and the county gets the money.

Mr. Kennedy: In matters of this kind, it is only for breaches of the peace that come under the state law that the fines are paid into the county treasury; for all breaches of municipal ordinances the fines go into the city treasury. The justice's salary is paid by the county, and he has the same fees from the county in criminal cases that the constable does, and the Marshal has the same right. That is my opinion of it, and that is the way it has been done in our county. If our recorder, we will say, takes up a vagrancy case that comes under the jurisdiction of the county court, he can put in his bill for three dollars and collect it the same as a justice of the peace, and the marshal who serves the process has a bill against the county. So the town is not a loser.

Mr. Harrison, of Stockton: As bearing upon that subject, I have a communication here from the judge of the justice's court of our city. It seems to me from a reading of it, that the law is that the fines shall be paid into the county treasury, and we certainly are paying the justice for the work.

Mr. Chairman: Stockton belongs to the fourth class of cities.

Mr. Miner: Stockton is like San Jose in this particular, and we have had one case that makes it seem ridiculous, and that is that the board of supervisors of the county has twice appointed a justice of the peace for us, when it is distinctively a city officer. That is one thing that we would like to see referred to the Legislative Committee.

Mr. Hutchinson: There was at one time quite an incongruity in the law with regard to sixth class corporations. The trustees appointed the recorder or town justice, but they were limited in



their choice of justices of the peace of the township. In some cases, particularly in Palo Alto and St. Helena, it resulted peculiarly. With us, we had to take the justice elected in Mayfield, a liquor town, he being the only man who could be elected, and only through him could we enforce our anti-liquor ordinances.

The question was unanimously referred to the Legislative Committee, with instructions to report at the next session.



### Electric Lighting Contracts.

Mr. Toll: If this is a proper time to suggest a new topic for discussion, I would like to bring of the question of the limitation of street lighting contracts to one year. With us it is a very bad measure. A very large amount of money is required for the erection of a distribution system, and there is no corporation willing to invest that amount of money upon a one year contract. So it simply keeps in power the old corporation, and allows them to charge about what they want to. As introducing an element of economy, I want to suggest that one year is entirely too short a limit. There is no reference made to it in our charter, and so we are governed by the general laws.

Mr. Devine: I think that one year limitation is a good idea. In Sacramento, notwithstanding we have four companies, and the advantage of water power and electrical transmission, we have no competition at all. These gentlemen will find that they have the same experience when they get two or three more water companies in the field.

Mr. Toll: I think that if we made limit five years, it would be much better. I am sure that that would be the experience everywhere. As I said before, we are practically without competition now, and there would be some possibility of it there.

The Chairman: As it may seem to some of you that the remarks of the last gentleman are perhaps out of order, I will state that the contrary is the case, since we are to discuss this morning, according to the program, Problems Connected with Street Lighting.

Mr. Spinney: We have had the same problem in Fresno. If the gentleman will look at the statute books, he will find, I think, a clause by which he can get around the matter very nicely. He can make a contract for one year, with the privilege of two or three or four or five years, so that after one year has expired, the next year will succeed. We had a contract for five years that way in Fresno, for the care of sewers, where there was the same provision.

Mr. Scott of Livermore: I had occasion, Mr. Chairman, to investigate the question of which the gentlemen are now talking. At that time there was only one electric plant in Livermore, and we were paying ten dollars for per light, moonlight schedule. An opposition plant put in a bid, and their figure was \$6.80 per light. As the law stood at that time, we could only give the opposition plant a contract for one year. The town entered into a contract with the opposition company for one year. Before the year expired, they declared a renewal of the contract for two years more, and the question then arose as to whether the town had the right to grant a contract for street lighting for any time longer than one year. I investigated the question as City Attorney, and I found that I think it was in 1897 an amendatory act was passed allowing a town of our class, the sixth class, to make a longer contract than for one year. But that would not affect larger cities.

Mr. Keegan: The statute permits smaller cities making any contract as it is now, but it is a limitation upon the larger cities. The question came up in our town just as the gentleman from Los Angeles has presented it today. I was a member of the Legislature at that

time, and they asked me to endeavor to pass the bill to get that relief. The representatives from the large cities did not wish to make the amendment to the statute general. So they permitted it to go as a provision affecting towns of ten thousand or less.

Mr. Devine: Speaking on this same head, it seems to me the result of this limitation is all right. Because when you get into the larger cities, there is some kind of evil influence among Councilmen, and the electric light men can come in and get a pretty favorable contract. I think it would be a dangerous experiment to change this law to include the larger cities. At least, that is my experience.

The Chairman: Of course, we run the risk of escaping to evils that we know not of

Mr. Toll: That is based upon the fact that city officials are dishonest, and I want to testify that in my association with them for four years in Los Angeles, I believe they can be trusted.

Mr. Spinney: I believe it would be a good idea to allow all classes to go into it, and then make a general law to go with it that will allow all the cities to purchase their own plants.

Mr. Burkett of Chico: In Chico we have two lighting companies and an incandescent system of about thirty lights, but we contemplate lighting the whole town with smaller lights, incandescent, electricity or gas, but neither company desires to entertain a contract for one year. It would be very expensive to either wire or pipe the town. I should like to see a change in the law that will give us the right to make a longer contract.

Mr. Pyne: I see no reason why this privilege should not be extended to all cities. I move that it be referred to the Legislative Committee, with the recommendation that a law of that kind be passed.

By consent the further consideration of the matter was passed until after the paper of Prof. Marx and other papers

upon the subject noted upon the program, pending which discussion was invited upon the subject of



### **The Disposal of Franchises and How to Secure Revenue Therefrom.**

Mr. Toll: I had no intention, Mr. Chairman, personally, of bringing this matter to the attention of the convention else I should have prepared myself. But I have been in contact with the subject in all its phases. With us it is one of the most important things that demands the attention of the municipality, and I think it should be taken up by this body, and, through it, by the Legislature. The whole subject-matter is in a chotic condition. I think it is quite as important to the smaller cities as the larger, because as the cities grow, their franchises grow in importance. The fact is, franchises all over the country have been practically given away. That rises in part from the fact that at the time they were asked for the demand was very imperative on the part of the people in the section of the city to be directly benefited that the franchise should be granted. Later on the people rise up and blame the original governing body because something was not reserved. There ought to be some way devised by which, with proper foresight, with some gift of divining the future, we could estimate the amount of remuneration that the companies should pay from time to time. I realize that it is extremely difficult for anybody to stand up and demand from the companies what should be demanded in the interest of the city, and for legislative body to act for the entire people in the presence of such an imperative demand. In fact, it is the same element of selfishness that always puts itself forward in any matter of public control. The present law was introduced into the legislature by Mr. Meade of the southern part of the State. It was intended for the good of the



people, but unfortunately, it did not embrace within its provisions a proper provision for gaining from the corporations remuneration. In theory it was all right, but in practice it seems that it was all wrong. And two years ago, just before the Legislature met, when we had several pressing demands for franchises, I consulted Mr. Meade, and he said by all means avoid operating under this law until we could have it changed. When we attempted to change, we encountered a conflict between corporations which practically nullified the whole thing. But I think that by good work on the part of this convention and the cities that are members of the League, something could be done in the interests of the municipality having both a just regard for the corporations and a just consideration of the people. I realize that it will be hard to accomplish what is necessary and desirable. With us, we have to cope with existing conditions, which makes it all the more difficult than if we were just starting out. We have one company which operates very largely in the city, and most of the desirable routes are in its control. We also have an opposition company that is fairly well established, and which is really the favorite, as is almost always the case where the people have been oppressed. But when it comes to bidding the company is at a disadvantage. By reason of its desire to protect its existing lines, the old company can bid more. The business is just as desirable to one as to the other, as far as new business is concerned, but the old company is in a position that makes it necessary to have the extended lines. The result is that the new company fails to get a footing, and the old company is strengthened from time to time. In the long run, I think we could have better service if we had more keen competition. There are many difficulties in the way that will be overcome before the matter can be satisfactorily provided for. In the matter of percent-

ages of revenue to be paid to the municipality, there has developed lately a feeling that the percentage should be fixed by the legislative body, so that all competitors will bid upon an equal footing, so far as that is concerned. That eliminates the disadvantageous proposition of percentages being stated in the bids. Another idea advanced is, that there should be, in addition to the percentage feature, a cash bidding basis. Then the real competition would come in in bidding a cash bonus, and then having a fixed percentage say after five years. In that way the city would get some immediate remuneration, and would have provided for the future. A limit of time would always be provided in a franchise and I do not think that should be over twenty-five years, and I believe then there should always be inserted a provision that the municipality should be allowed to acquire its roadbed at the end of the period upon paying a proper compensation therefor. Some cities go so far, I understand, as to take the entire road, compensating the company for its rolling stock. That is not a bad idea either. There is no question but what the matter of municipal control in street railways, as well as in other public utilities, is coming to the front very rapidly. There is hardly any limit to the possibilities of public ownership, I believe that communities will take up these public utilities, just as fast as the sentiment is developed in any particular community. Of course, they will not all develop it at once. In view of this sentiment, I think every time a franchise is now granted, that the reservation should be made. Of course it would be very difficult, as there would be so much opposition to it, but the people have the decided advantage, if they will but exercise it. In Los Angeles we are refusing to grant any more franchises at present, even though we meet with some censure on that account. I think there should be decisive action taken upon this question of franchises at the next meeting of the

Legislature, and I sincerely hope that this convention will take the matter up, and that some good may result from it. (Applause). On the suggestion of Mr. Hutchinson, I believe it would be productive of much good if this matter were referred to a special committee, consisting of our President and Secretary, together with three members from the cities that are perhaps most vitally interested, the committee of five to take up the matter and draft a bill to be presented to the next Legislature.

Mr. Riffin: I would like to suggest. Mr. Chairman, that this committee pay attention also to the matter of franchises for water and lighting. It seems to me that such a franchise is even of more vital interest as effecting light and water than as affecting the street railways, because those subjects interest a larger number of people. It is oftentimes inconvenient and inexpedient to have municipal ownership of light and water plants, and the small towns particularly should have some means of controlling the corporations. I presume it would take a constitutional amendment to secure control over such franchises, but it seems to me that it is something that concerns every city and town in the State, whereas a railroad concerns but a few.

The motion unanimously prevailed, and the President appointed as the three members of the committee other than the President and Secretary, Mr. Toll, of Los Angeles, Mr. Harrison, of Stockton, and Mr. Riffin, of St. Helena.

[NOTE—Lack of space prevents the publication in this issue of the special papers read this day before the convention. In the January number will appear papers on "Cost of Municipal Lighting," by Prof. C. D. Marx, "The Lighting of City Streets," by E. C. Jones, "Practical Working of San Francisco's Charter," by Mayor James D. Phelan, Remarks on Municipal Concerts, "Oil for Streets," by A. E. Brock, "Public Water Supply for San Francisco," by Chas. Wesley Reed, "Hints to Clerks," by M. L. Hanscom, "What Trees for Streets," by Prof. J. G. Lemmon.]

## Amendments to By-Laws.

The Committee on amendments to the By-Laws reported the following amendments, which were adopted:

Amend Article X to read as follows:

This organization shall be composed of municipalities of the State of California who have signified their intention to become identified with this League, and who have paid the annual dues hereinafter provided for, viz:

For Cities having a population of less than 1,000.....	\$10.00
For Cities having a population of more than 1,000 and less than 3,000.....	20.00
For Cities having a population of more than 3,000 and less than 10,000.....	30.00
For Cities having a population of more than 10,000 and less than 30,000.....	40.00
Cities having a population of more than 30,000 and less than 150,000.....	50.00
Cities having a population of more than 150,000 .....	60.00

Add a new article to be numbered Article XII to read as follows:

### HONORARY MEMBERS.

Every person who has been an officer of this League, upon his retirement as an official of a municipality, shall become an honorary member of this league. The convention of the League may also elect any person as an honorary member of the League. Such honorary members may participate in the proceedings of the convention, but will not be entitled to a vote.



## Election of Officers.

The Chairman: The next business before the convention is the election of officers. The Chair will entertain nominations for the office of President of the League for the ensuing year.

Mr. Phelan: I desire to place in nomination for President a gentleman who has been associated with the League during its entire existence, and who has served in various capacities in connection with it, and has always shown a lively interest in it and its work, and whose work, moreover, has resulted in very much benefit to the League. I refer to Mr. Joseph Hutchinson, of Palo Alto. (Applause.) Besides his fitness and services, there is another reason why he would make an



acceptable President of this League, and that is that he represents one of the smaller cities. The smaller cities are really more interested, if there be any difference, than the larger ones, and I think it would be wise to have an executive from one of the smaller cities. And Palo Alto, while it has been but a few years in existence, is a leading city in many respects; she has had all the benefits of the experiences and mistakes of the older cities. It seems to me that the convention cannot do better than to select Mr. Hutchinson for President for the ensuing year.

The nomination was seconded by Mr. Robertson, of Los Gatos. On motion of Mr. Bayley, the nominations were ordered closed, and the League unanimously instructed the Secretary to cast the ballot for Mr. Hutchinson.

The Chairman: There are cries for Mr. Hutchinson, and we would like to hear from him.

Mr. Hutchinson: Mr. Chairman and Gentlemen: I will confine myself to three minutes in thanking you for this honor, which I understand is not an honor to me and my town, but to the Stanford University Football Team for winning the last match. (Laughter.) I represent a small town. Mr. Spinney has said that the small towns would have to watch the big ones. During the next year Mr. Spinney and I will do the watching. (Laughter.) The Psalmist says, "I lift up mine eyes unto the hills from whence cometh my help." We lift up our eyes at present to Sacramento, and we must move on Sacramento next month as a solid body, and use all our influence together, or we will not accomplish anything. I think it is a very good omen that a delegate who has been here from Sacramento has such a suggestive name. I will simply say to you in conclusion that during my administration, I shall ever pray for Divine inspiration. (Applause.)

The Chairman: We will now listen to nominations for the office of First Vice President.

Mr. Lamborn nominated Mayor Parker, of Santa Cruz. Mr. Partridge nominated Mr. Canfield, of Chico. Mr. Canfield withdrew, and, on motion of Mr. Partridge, the nominations were declared closed, and Mr. Parker was then elected First Vice President of the League.

Mr. Partridge then nominated Mr. Canfield, of Chico, as Second Vice President, the nomination was seconded by Mr. Lamborn, and Mr. Canfield was duly elected as Second Vice President of the League.

On motion of Mr. Canfield, seconded by Mr. Bayley, Mr. H. A. Mason was re-elected Secretary of the League.

The report of the Nominating Committee was then received, showing the following names for the various committees, and on motion of Mr. Hutchinson, seconded by Mr. Parker, the report was unanimously adopted, and the Secretary cast the ballot of the League for the gentlemen named. Following are the members of the committees:

EXECUTIVE COMMITTEE—Joseph Hutchinson, H. A. Mason, James D. Phelan, J. W. Keegan, Santa Rosa, and Ed. Tedford, Santa Ana.

JUDICIARY COMMITTEE—C. N. Kirkbride, San Mateo, R. F. Robertson, Los Gatos, H. L. Partridge, San Jose, E. C. Bailey, Pasadena, J. T. York, Napa.

LEGISLATIVE COMMITTEE—E. K. Taylor, Alameda, A. Kincaid, Redwood City, G. R. Kennedy, Chico, H. H. Pyne, Healdsburg, A. E. Brock, Redlands.

ENGINEERING COMMITTEE—W. B. Clapp, Pasadena, G. L. Richardson, San Rafael, Thos. N. Badger, Emeryville, D. Bromfield, San Mateo, C. E. Moore, Santa Clara.

### Selection of a Place of Meeting.

Mr. Bayley, in the absence of the representatives from Los Angeles, and acting for them, placed Los Angeles in nomination, and it was seconded by Mr. Lamborn. Mr. Canfield nominated San Francisco. Mr. Spinney placed Fresno

in nomination. Upon a ballot being taken, Los Angeles received 14 votes, San Francisco 7, and Fresno, 2, and Los Angeles was declared to be the place of the next meeting.

On motion of Mr. Phelan, seconded by Mr. Bayley, the By-Laws were suspended by unanimous vote, so that the next meeting of the convention to be held in Los Angeles should be held on the second Wednesday in January, 1902, instead of the second Wednesday in December, 1901.

On motion of Mr. Phelan, a vote of thanks was unanimously tendered to Mayor Show, of Oakland, for his able conduct of and efficient service in the office of President of the League.

The convention then adjourned.



## What the Cities are Doing.

Modesto has sold \$40,000 sewer bonds to Williams & Co., Pittsburg. The price bid was \$43.050, a very good premium.

Sacramento will burn oil for fuel at its water works pumping station. Alameda and Santa Cruz are also considering the advisability of burning oil.

Oakland and Berkeley voted down sundry proposed amendments to their respective charters.

Hanford will sell \$31,000 of sewer bonds on January 7th.

Riverside is considering the proposition of narrowing the roadway in residence districts and adopting the boulevard plan of improving the streets.

Berkeley Trustees have repealed the prohibitory ordinance and the town is damp once more.

Long Beach is considering a bonding proposition for sewers and wharf improvements.

Alameda's municipal light works will hereafter furnish an all night service.

D. J. Flanigan has been appointed Mayor of Eureka, vice David Evans, resigned.

In the matter of letting the contract for the construction of Water Works at Pleasanton, all bids were rejected on December 3d, as being in excess of the money on hand. The plans will be modified in order to reduce the cost.

A suit has been instituted to test the validity of the Los Angeles Water Works bonds.

Paso Robles has purchased 400 trees for the streets.

Santa Monica aspires to be a city of the 5th class.

Pasadena is considering the adoption of a milk ordinance.

Oceanside will receive bids for the purchase of \$5,000 Wharf bonds on January 8th.



## Los Angeles Officers.

At the election held Dec. 3d, the following officers were elected in the City of Los Angeles:

Mayor, M. P. Snyder; Clerk, C. H. Hance; Attorney, W. B. Mathews; treasurer, W. H. Workman; auditor, Ejijah Unger; tax collector W. A. White; engineer, H. F. Stafford; street superintendent, H. J. McGuire; assessor, Ben E. Ward. Councilmen: First ward, W. H. Pierce; Second ward, George P. McLain; Third ward, Frank Walker; Fourth ward, P. W. Powers; Fifth ward, W. M. Bowen; Sixth ward, A. A. Allen; Seventh ward, Ben Lauder; Eighth ward, R. A. Todd; Ninth ward, E. L. Blanchard.



City officials will do a favor if they will endeavor to secure subscriptions to CALIFORNIA MUNICIPALITIES only One Dollar a year. Everyone interested in municipal affairs ought to be a subscriber.



That interesting publication *City Government* has changed its name to *Municipal Journal and Engineer* with its office of publication at 253 Broadway, New York City. This is a publication that every city official should read regularly if he has any desire to keep abreast with the times. It deals with every phase of municipal activity in a practical manner and its contents are varied and valuable. The subscription price is \$3.00 a year.



A recent publication of value to municipal officers, especially those of smaller towns, is *Municipal Public Works*, by Ernest McCullough, C. E. It is a volume of 150 pages and the chapters are headed "Concerning Streets," "Drainage and Sewage," "Water Supply," "Street Lighting and Fire Department," "Plans and Surveys," "Municipal Ownership," "The City Engineer." Mr. McCullough was formerly a city official in California and, hence his observations very appropriately meet our local conditions. Copies of this work may be obtained for 50 cents by addressing the author at Lewiston, Idaho.



An arrangement has been made by which a copy of *Midland Municipalities* published by Hon. Frank G. Pierce, Marshalltown, Iowa, will be sent to the chief Executive of each city in this State belonging to the State League. This is a complimentary arrangement that has been entered into by the pub-

lishers of two municipal journals and which we trust will be appreciated by those receiving a copy. Those who receive those copies of the magazine referred to will please note that they can take them from the post office without being liable to pay the subscription price.

WRITE

CHAS. A. NACE

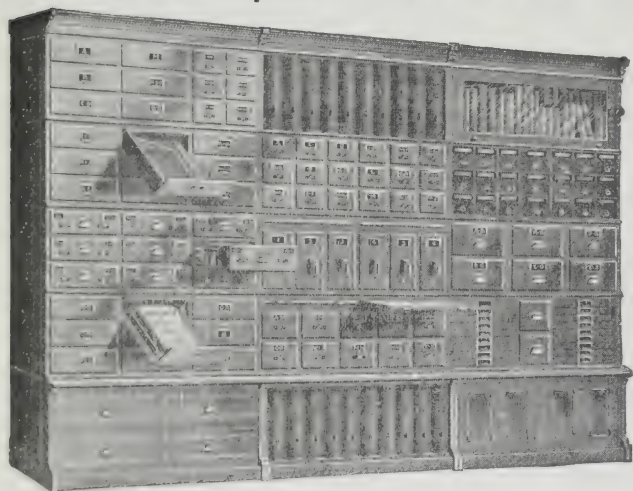
SANTA CLARA, CAL.

FOR ESTIMATES

ON PAMPHLET

PRINTING.

## Municipal Officers and Others



When in San Francisco  
can spend a

### Profitable Hour

inspecting our stock of

Letter Files  
Document Files  
Card Index Systems  
Sectional Cabinets and  
Book Cases

and you will find

## Just What Your City Needs

and if you are a business or professional man

**Payot Upham & Co.,**

204 Pine St., S. F.

## Just What You Need.

# CALIFORNIA MUNICIPALITIES

VOL. 3.

JANUARY, 1901.

NO. 6.



PUBLIC LIBRARY, PASADENA, CAL.

SAN FRANCISCO OFFICE . . . . .  
ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.



# Paul Seiler Electrical Works,

Telephone Main 5454.

Manufacturers and  
Dealers in

Paul Seiler, Propr.

TELEPHONE, TELEGRAPH AND  
ELECTRIC LIGHT SUPPLIES.  
ELECTRO MEDICAL BATTERIES.

406-408 MARKET ST.

SAN FRANCISCO, CAL.

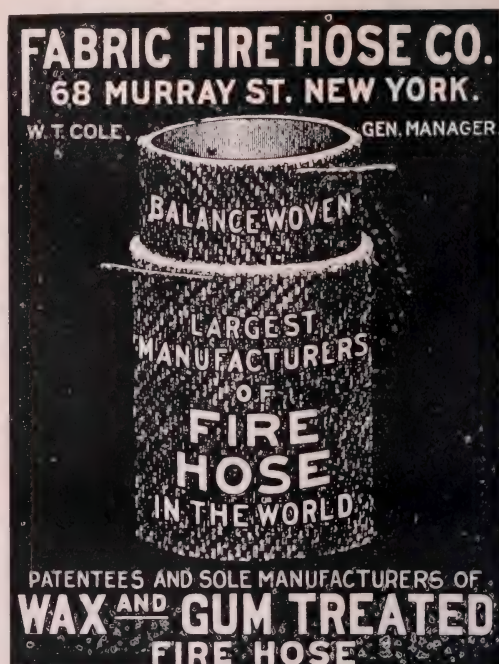


## Use Yates' Paint

On all Public Work.

It is DURABLE.

Manufactured in  
San Francisco, at 117-119 Market Street.



San Francisco Headquarters at 509-511 Market St.

New York Belting & Packing Co. Ltd.

# P & B

## Building Papers

## Ready Roofings

ALL DEALERS

MANUFACTURED ONLY BY

## Paraffine Paint Co..

## San Francisco

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 3. January, 1901. NO. 6

## California Municipalities.

Published Monthly.

H. A. MASON, Editor.

Office of Publication, SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

### CONTENTS.

#### EDITORIAL:

The Progress of Legislation.....	187
Notes.....	188

#### PAPERS READ AT THE LAST CONVENTION.

The Cost of Electric Current at Palo Alto <i>Prof. G. H. Marx</i> .....	189
Lighting of City Streets by <i>E. C. Jones</i> .....	192
Public Ownership of the Water Supply of San Francisco by <i>Chas. Wesley Reed</i> .....	196
Street Cleaning by <i>Jas. D. Miner</i> .....	200
Hints for Clerks by <i>M. L. Hanscomb</i> .....	202
Practical Workings of San Francisco <i>Jas. D. Phelan</i> .....	210
Other Freeholders Charters.....	216
Municipal Concerts.....	204
Oil for Streets by <i>E. A. Brock</i> .....	205
What Trees for Streets by <i>J. G. Lemmon</i> .....	206
Municipal Colliers.....	218
Library Department.....	219
A Golden Opportunity—Relation of Libraries to Public Schools—Library Consolidation—Library Progress in California.	
What the Cities Are Doing.....	222

**The Progress of Legislation.** The State legislature has been in session nearly three weeks at this writing and substantial progress has been made in considering the legislation deserved by CALIFORNIA MUNICIPALITIES along the lines suggested at the late convention of the League.

In all, nine bills and one constitutional amendment have been drafted and introduced in the legislature. These are the league measures:

The new street law is embraced in Assembly bills 98 and 99 and Senate bills 125 and 126.

A new bond act is Assembly Bill 8 and Senate Bill 124.

To give Sixth class cities the right to establish five limits is the object of Assembly Bill 183 and Senate Bill 123.

To provide a special tax for specific public improvements is the subject of Assembly Bill 184 and Senate Bill 121.

The new library law is known as Assembly Bill 174 and Senate Bill 115. This bill has already passed the Senate.

To amend the law so that fines imposed for the violation of city ordinances is the purpose of Assembly Bill 167 and Senate Bill 122.

To amend the law striking out the limitation on the power of 5th class cities to purchase water works is the subject of Assembly Bill 363 and Senate Bill 212.



Bills have also been introduced to permit three-fourths of a jury to render a verdict in cases for the violation of city ordinances.

A constitutional amendment is in the Senate to exempt public bonds from taxation.

These are known as the League Measures. With the exception of the last three all have been reported favorably by the Senate committee on Municipal Corporations and the Assembly committee has favorably reported four of them. Next week will see them on the files of both houses ready for passage.

While we apprehend no serious difficulty in passing these bills, it would facilitate matters if Boards of Trustees and Councils would pass resolutions requesting the Senators and Assemblymen of the districts in which the various cities may be situated to interest themselves in the passage of these measures and to vote therefor.

Please do so at your next meeting.

\*\*\*

Many other laws affecting municipalities have been introduced and these are good, bad and indifferent. A bill to permit cities of the 5th class to consolidate certain offices ought not to be objectionable.

The law to permit municipalities to obtain public utilities by condemnation of existing plants is a good one.

The franchise law known as Assembly Bill 15 and Senate Bill 150 in its present form is very bad.

There are also bills to classify cities. This bill raises the population of the 4th class from 15,000 to 30,000 and the 2nd class from 100,000 to 150,000.

Another bill increases the pay of the city justices of the 2nd class from \$2,000 to \$2,400.

Another bill provides for the appointment of City Clerk and City Attorney in 5th class cities.

There are two bills amending the Vrooman.

There are also bills on the subject of licenses, prohibiting Marshals from collecting fees from counties for cases in Recorder's courts, providing pensions for firemen, validating re-incorporations (for the Town of Livermore) and a few others. These will all receive scrutiny by the League.

Anyone wishing copies of any of these bills can obtain them by addressing this office.

\*\*\*

MUNICIPALITIES is in receipt of an interesting letter from Wallace Dinsmore, City Attorney of Marysville, on the subject of street sprinkling, cleaning, etc. It will be remembered that this subject was talked of at the convention and it was desired to obtain some legislation that would permit cities to sprinkle, remove weeds, etc. and assess the cost to the property owners.

Mr. Dinsmore writes that the City of Marysville last summer passed an ordinance that secured this result and that the ordinance was upheld by the Superior Court. In view of this fact it has been deemed inadvisable to present the subject to the legislature. Mr. Dinsmore's letter and the ordinance will be published next month.

\*\*\*

Next month we will publish a number of articles telling what several towns have done in the way of public improvements during the past year. These are papers prepared for the last convention, but were crowded out for want of time.

\*\*\*

Senator Taylor is deserving of special thanks for his interest in municipal legislation. He introduced all of the League bills in the Senate and being chairman of the committee on Municipal corporations saw that they received an early report.

— Proceedings of the —

## Third Annual Convention

— of the —

## LEAGUE OF CALIFORNIA MUNICIPALITIES,

Held at San Francisco Dec. 12-14, 1900.

[Continued from December Number, and consisting of the Papers read on Friday Dec. 14th.]

**Cost of Electric Current at Palo Alto.**

By PROF. G. H. MARX, Stanford University.

I am called upon on rather short notice, owing to the inability of my brother to be present here this morning, to give you a report upon the cost of electric lighting in our municipal plant at Palo Alto—and not, as the title suggests, with its cost in municipal plants in general. Our plant has certain features which differentiate it from a plant established solely for electric lighting. The town owns and operates its water works, and has ample excess boiler capacity for the electric plant, since the pumping does not have to be carried on throughout the twenty-four hours. Moreover, we have ample storage capacity, so that these boilers can be utilized to raise the steam for providing power to run an electric plant.

The town voted \$40,000 in bonds for the establishment of a sewerage system, and was fortunate enough to build that system at a total cost of \$31,000, leaving \$9,000 on hand. This furnished an excellent nest-egg for the establishment of our electric lighting plant. At the present time the total cost of the plant, as will appear from the report which I shall read, and which is one that was made at my brother's request by certain competent engineering students, has been \$18,000. So it will have to be borne in mind that there is only \$9,000 upon which interest is being paid, the other \$9,000 being money that has been raised by direct taxation or by income from the plant.

Our plant is a small one, having a capacity of from 75 to 100-horse power. When the question arose—and this is a point upon which I think stress should be laid, because it will interest all of you who have come to the question of municipal plants—of opening bids on the engines, there was a great divergence in type and economy of steam engines offered. The bids were \$1700 to \$2300, the lower bid for a simple, non-condensing high-speed engine, and the higher bid for the most expensive low-speed simple engine, that is, an engine of the Corliss type. The question arose whether it would be economy to accept the lowest bid. A provision had wisely been put in the specifications calling upon bidders to state the guaranteed economy of their engines, and as a result of that guarantee was of a steam consumption not to exceed 26 pounds per horse power per hour, while the next lowest bid \$200 less, only guaranteed 28 pounds. Upon the basis on which the plant was to run, the saving in coal will be something over \$100 a year, which represents an interest on \$2000. Therefore the engine at the highest price named was worth twice as much as the engine with the two pounds less efficiency.

This question of efficiency is one of the most important questions you will have to determine in examining bids.

A question as to the cost of power arose from the fact that a private corporation wished to sell the town current at a certain price per kilowatt hour at



the switch board, using the town's distributing system. And, what price could the town afford to pay this company? The report will be found instructive, and I will now proceed to read it.

Stanford University, Cal.

C. D. MARX,  
PALO ALTO,

DEAR SIR:

Pursuant to your request I submit the following report on the cost of lighting by the Palo Alto Municipal Lighting Plant. It was somewhat difficult to determine the actual cost and to charge each of the items the correct amount, but I believe they are not more than 1 percent in error and this above rather than below.

OBJECT:

The object of the investigation was:

1st To determine the actual cost to the city per kilowatthour at the switchboard, based on the daily reports of the engineer during the months of September, October and November, 1900.

2nd To determine the actual cost, at the switchboard, of the city arc lights if operated on the moonlight schedule, based on the estimate as determined in (1st) and the consumption of power per arc as reported upon by Mr. Vial.

3rd To determine the actual cost to the city if it should close its power plant and buy power from outside parties.

To consider the operation of the plant as an individual enterprise, instead of a municipal affair, and determine the costs as outlined above.

COST OF PLANT:

The items of cost as collected by me from the books in charge of the city clerk are given in the following table. This includes all items changeable to "extensions" up to December 1st, 1900. The individual depreciation and maintenance charges are not tabulated, but  $5\frac{1}{2}$  per cent on depreciation and 2 per cent on maintenance is considered a fair value by lighting companies.

TABLE SHOWING COMPLETE COST OF PLANT.

Item.	Amount.
Building.....	\$ 1189 27
Poles and fixtures.....	1359 22
Line, including wire, meters, transformers, etc.....	7452 68
Line construction.....	1904 38
House connections.....	200 00
Power House electrical machy	3000 00
Steam engine and connections	2383 00
Sundries.....	105 35
Engineering .....	406 00
Total	\$18,000 00

INTEREST:

Interest should be charged on \$9000.00 only, as this is the amount upon which interest is being paid. The balance was raised by direct taxation and would be unjust to consider interest on on it here.

Five per cent. interest is being paid on the borrowed money.

ANNUAL FIXED CHARGES:

Interest on \$9000.00 at 5 per cent .....	\$ 450 00
Depreciation on \$18,000.00 at $5\frac{1}{2}$ per cent.....	990 00
Maintenance on \$18,000.00 at 2 per cent.....	360 00
Total	\$1 800 00
Monthly	150 00

FIXED MONTHLY EXPENSE:

Monthly fixes charges on 18,000.00 .....	\$150 00
One engineer at 60 00.....	60 00
Book-keeper and collector.....	10 00
Total	\$220 00

EXPENSE ACCOUNT FOR MONTHS OF SEPT., OCT., and NOV.

ITEM	SEPTEMBER	OCTOBER	NOVEMBER
Fixed	220 00	220 00	220 00
Coal	102 67	158 32	186 22
Oil	4 00	4 00	4 00
Waste	50	50	50
Total	337 17	382 82	410 72

The output at switchboard for these months was:

September.....	4152	kilowatt-hours
October .....	6090	“ “
November .....	7224	“ “

## COST:

The price per kilowatt-hour for these months is:

September, $(337.17 \div 4152)$ .....	8.12	cents
October, $(382.82 \div 6090)$ .....	6.318	“
November, $(410.71 \div 7224)$ .....	5.67	“

This is the price per kilowatt-hour at the switchboard allowing interest on 9000.00 only. If we consider the case as a commercial enterprise the monthly charges will be increased by \$37.5, the monthly interest on \$9000.00. Under this condition the price per kilowatt-hour will be, for

September, $(37467 \div 4152)$ ....	9.024	cents
October, $(42035 \div 6090)$ .....	6.9	“
November, $(44822 \div 7224)$ ....	6.2	“

## COST OF ARC LIGHTING.

From Frund's moonlight schedule for 1901 it was found that the arcs should be operation for

September.....	100	hours
October .....	127	“
November.....	135	“

Mr. Vial found by actual test that the the twelve arc lights consumed six kilowatts per hour. Hence the total number of kilowatt-hours consumed by the arc lamps for the several months are,

September, $(6 \times 100)$ .....	600
October, $(6 \times 127)$ .....	762
November, $(6 \times 135)$ .....	810

Basing a charge of 8.12 cents, 6.318 cents, and 5.67 cents per kilowatt-hour as shown on a previous page, it will be seen that the actual cost for arc lighting during these months is for

September, $(600 \times .0812)$ .....	\$48 72
October, $(762 \times .0632)$ .....	48 55
November, $(810 \times .0567)$ .....	45 92

Ninety-six hours is the *average* time the arcs will be in operation each month of the year. If we assume that the average price per kilowatt-hour will be seven cents, the cost per arc light per month will be  $96 \times .07 \times 6 \div 12 = \$3.36$ .

The twelve arc lights will cost \$40.32 per month or *each* will cost \$40.32 per year. POWER BOUGHT FROM OTHER PARTIES:

If the city should buy power from other parties, the only factors modifying the above figures would be the closing of the power house. The line, including all transformers, meters, house connections etc. would be subject to the same charges as at present, and a man would have to be employed to look after it, whose monthly salary would not be less than \$60.00 The only items saved would be fuel, oil and waste. It is a question whether or not part of the maintenance and depreciation charge on the power house machinery should be deducted but for the present estimate this will not be considered.

It would not seem advisable to sell the power house machinery, since then there would be no competition and nothing to prevent an increase in rates by the supplying electric company.

THE FIXED MONTHLY EXPENSE in this case would be, then, \$200.00. COST:

The price per kilowatt-hour based on the output for September, October, and November would be, for

September, $(21000 \div 4152)$ .....	5.3	cents
October, $(22000 \div 6090)$ .....	3.612	“
November, $(22000 \div 7224)$ .....	3.045	“

A mean value, we might say, would be 4 cents per kilowatt-hour.

## SUMMARY AND CONCLUSIONS:

1st The actual cost to the city per kilowatt-hour for the months of September, October, and November is 8.12 cents, 6.318 cents, and 5.67 cents respectively.

2nd The same but including an additional charge of 5 per cent interest on \$9000.00; 9.024 cents, 6.9 cents, and 6.2 cents respectively.

3rd The cost of arc lighting, estimated on the price in (1st) above, for the three months, September, October and November is: \$48.72, \$48.55, and \$45.92 respectively.

4th The actual cost per kilowatt-hour



for light if bought from other parties in addition to the price paid for power would be, for

September .....5.3 cents

October.....3.612 "

November.....3.045 "

5th The maximum price that the city could afford to pay for light would be, based on the estimate for

September, 8.12-5.3.....2.82 cents

October, 6.318-3.612.....2.706 "

November, 5.67-3.045.....2.625 "

Respectfully submitted,

G. F. MADDOCK.

#### DATA:

Price of Coal per ton of 2240lb.....\$7 44

Weight of coal chargeable to engine

September .....30 929lb

October .....47 681lb

November .....56 050lb

Actual Output in kilowatt-hours

September .....4 152lb

October .....6 090lb

November .....7 624lb



### The Lighting of City Streets.

By E. C. Jones, Superintendent of S. F. Gas and Electric Co.

**I**N preparing a paper on such an important topic, a topic which affects the comfort and safety of communities, it is customary to use graphic illustrations, usually called exhibits.

Exhibit A is the streets of San Francisco lighted by the Welsbach Burners of 100 candle power each, placed in Boulevard Lanterns with oval tops to act as reflectors. These lights are placed at a diagonal distance apart of 180 feet while the distance centre to centre on the line of the street is about 160 feet. Thus lighted, the city of San Francisco is one of the best lighted cities in the United States.

Under the provision of the New Charter of our city, the Supervisors are only permitted to contract for city lighting for one year.

Previous to the introduction of in-

candescent gas burners the city streets were lighted by ordinary flat flame governor burners, consuming five cubic feet of gas per hour, and giving a light of twenty candle power.

The Supervisors in casting about for some better means to light the streets, discussed the various methods of electric lighting, and their respective merits, and finally the San Francisco Gas and Electric Company offered to equip their lamp-posts (over 4500 in number) with Welsbach lights on a one year trial. The cost of this experiment was enormous to the company, and the benefits to the city are equally enormous, but in converting so great a number of lamps for so short a period of time, about 2900 of the old lanterns were painted with aluminium coating and provided with complete Welsbach burners with wind guards and arrangements for lighting, while about 1800 of the highly ornamental Boulevard Lanterns were placed on the resident districts of the city, and on lower Market Street, two Welsbach burners were placed in each lantern thus furnishing a light of two hundred candle power nearly equal to an electric light. Should this new way of lighting the city streets become popular and satisfactory, arrangements have been made to displace the ordinary lanterns with those of the Boulevard type.

In this connection it has been found more effective and desirable where a greater number of burners is needed, to increase the number of complete lanterns on each lamp post instead of multiplying the number of mantles within one lantern. Following out this idea, a number of clusters of three lanterns each, are now on the way from the east to be erected on our streets to demonstrate their superiority over arc lights for street lighting. These clusters will have an illuminating power of 300 candles, and in addition to the increased lights, which is as much if not more than the average actual candle power of arc lights, the clusters will add to the

beauty of the streets, and be nearer to the ground where the light is needed.

The principles of photometry or the measurement of light are well understood, and the almost universal standard employed is the sperm candle specially made to consume 120 grains of sperm per hour. This standard is used to convey to the public mind the relative lighting values of illuminating agents, and from the inception of the gas business, the quality of gas has been known by its candle power which represents the amount of light (expressed in sperm candles) which can be obtained from five cubic feet of the gas burned during one hour.

In the infancy of the gas business, the burners employed were crude and inefficient, consisting of simple jets of flame, and the candle power was correspondingly low.

By experience it was found that a greater candle power might be obtained from the same gas by improving the burner through which it was consumed, until skill and labor gave to the gas examiner what is known as the Sugg Argand Burner for photometric use. This burner was supposed to so regulate the supply of gas and air that complete combustion of the gas was assured, and as nothing better was known by which the highest candle power of the 5 feet of gas could be developed, this form of burner has been accepted by nearly all the gas examiners in the world, as a standard and notably as the Parliamentary Standard of Great Britain.

The light from gas burned in open tip or Argand burner is produced by incandescent particles of carbon liberated from the gases and continuous spectra are always obtained but the various groups of color are not always distributed in the same proportion and the red, orange and yellow predominate. This is owing to the low flame temperature yet the light emitting surface is large and a well diffused and pleasant though not intense light is the result.

The discovery of Dr. Auer of the

principles of utilizing the heat of the gas by applying the heat flame of a Bunsen burner to a lace-like mantle of very refractory metals, immediately opened a new era in gas lighting and the gas manufacturer was appalled by the fact that by the more economical application of the heating power of the gas to a secondary medium instead of its contained carbon, over twice the candle power was obtained from much less quantity of gas.

The chemical theory and development of light in this new way is a tempting subject but out of place in a paper of this kind. Enough to say, that by continued research and application of skill the incandescent mantle now develops five times as much light with forty per cent less gas.

This discovery has cast some doubts on the methods employed to determine the lighting value of gas, and photometric standards are tottering on the base, for why should not a gas be tested and its candle power determined by the the burners giving the greatest efficiency?—if so the 20 candle gas of today would be the 166 candle gas of tomorrow. This brings to our minds the fact that we must measure the value of gas by its heat units per foot rather than its easily disputable candle power.

The illuminating effect produced by different sources of light is dependent upon three conditions—first, the surface from which light is emitted; second, the intensity or flame temperature and third, the color of the light emitted. If a source of light has a large area and high intensity as in incandescent gas lighting, the result is a well diffused far reaching light.

Diffusion of light depends on the area of the surface from which the light is emitted. This is obvious because every portion of the surface gives out rays of light which travel in straight lines and the more surface the more rays. For instance, the portion of mantle of the incandescent gas burner which



is highly incandescent has an outside surface area of 9 27-100 inches per 100 candle power or 927-10000 inch per candle. From every part of this mantle, rays of light are projected in all directions and if the mantle is highly heated, it furnishes a light both brilliant and far reaching.

In contrast with these conditions, the carbon filament of 16 candle power 110 volt incandescent electric lamp has a surface area of only 122-1000 of an inch or 76-10000 inch per candle. This light is different in color, or lower intensity and has only one seventy-sixth the diffusing area of the outside of a Welsbach mantle, and is entirely unsuited to the requirements of good street lighting.

The arc electric light which is "nominally called 2000 candle power" gives an amount of light when tested photometrically in the same manner as other lights equal to about 500 candle power, but what is known as French measurement, (i. e. measuring the candle power from four points of the compass  $500 \times 4 = 2000$ ) increases this to 2000, but most Gas Engineers would not be surprised if the candle power of an arc lamp were multiplied by all of the 32 points of the compass, in order to pad out its shortcomings. It has been estimated that in a continuous current arc lamp 5 per cent. of the total light is due to the arc, about 10 per cent. is furnished by the negative carbon and the remainder or about 85 per cent. by the positive carbon.

The crater of the Copper coated carbons has an average area of 1-1000 of a sq. inch and assuming the candle power to be about 500, the light emitting surface, would be 42 millionths of a sq. inch per candle. The intensity of this light is exceedingly high, but because of its small light emitting surface, the number of rays is small and consequently the diffusion of light is imperfect. The Welsbach mantle has an area 2207 times greater than the crater of an arc light carbon. The color of

light as well as the color of objects lighted, plays a very important part in illumination, and without treating the subject in too technical a manner, I want to call attention to easily distinguishable effects of light of different colors.

The old fashioned oil lamp with its red flame, gave out well diffused, far reaching rays that penetrated a fog better than the blue rays of the electric arc, and for this reason the light houses of the world do not use the electric light and rail roads use red lamps as danger signals.

In the oil flame and the ordinary gas flame, the orange and red rays, and the ultra red or heat rays predominate, while the light from the electric arc is rich in blue, indigo, violet and the ultra violet or chemical rays.

Between these lights, the light of the Welsbach Burnes gives a spectrum in which the green, yellow and orange, or illuminating rays predominate.

I have prepared a diagram showing the relative wave lengths of the extreme red rays represented by copper wires of the same length when drawn taut. In this diagram 1-100 M. M. is represented by half of a city block, and the wires are bent in waves to represent the number of waves of the different colored rays per 1-100 M. M. second.

(Extreme Violet 25 42-100 Yellow 16 98-100 and Extreme Red 13 15-100 waves.)

This illustration seems exaggerated, but ordinary observation of the lighting effect of the arc light and Welsbach burner will demonstrate its truthfulness, especially in a foggy atmosphere. You are all familiar with the sound effects of an approaching brass band. First the tones of long wave lengths of the Bass Drum reaches the ear, then the Bass Tuba, Trombones, Alto Horns, and Cornets with sound waves of shorter lengths until finally the music of the Flutes and Piccolos with their waves of rapid vibration is heard. This is sometimes imitated by pieces of music such as the Turkish Patrol and serves to illustrate

the diagram where light of different wave length takes the place of sound.

Incandescent gas lighting is rapidly and permanently displacing all other methods of street lighting in the United States while in Great Britain and on the Continent (which is the birth-place of the Welsbach light) rapid strides have been made in this best way of lighting. In Liverpool incandescent gas lights are used on all the city streets while clusters of two, three, four and even more are placed in one lantern on the principal thoroughfares. Some crossings, public squares, and bridges have a number of lamps grouped on one post.

Liverpool tried the experiment of street lighting by incandescent electric lights placed on the poles of the electric street car lines. but these were soon supplanted by the incandescent gas lights. Glasgow is lighted partially by Welsbach burners and many flat flame burners are used.

In Edinburgh the streets are better lighted than in Glasgow, and many more Welsbach burners are used. Nearly all the cities on the Continent are lighted by Welsbachs. Some of the principal streets are lighted by four or more rows, the lights being placed directly opposite one another instead of diagonally as in our own cities.

This is particularly noticeable in Paris, the most beautifully lighted city in world; wherever there is the slightest need of light a lamp is placed, apparently without thought of expense.

Some of the boulevards are lighted with four and six rows of incandescent gas lamps and the absence of electric lights is everywhere conspicuous.

Standing at Place de l'Opera, a view is had of the Avenue de la Paix, lighted by incandescent gas lamps and at the same time without changing position, one sees the full length of a great boulevard entirely lighted by electric arcs. The opportunity for comparison could not be better and all in favor of gas. The electric lights have dark areas be-

tween them, while the gas gives a uniform soft light covering the entire street surface.

During the World's Fair at Paris, the Paris Gas Company lighted the Parks of the Champs de Mars with the Welsbach Burners and the Trocadero with another type of burner known as the Denayrouz, to demonstrate the superiority of gas over all other illuminants for street lighting. The light of these burners aggregated 1,000,000 candles distributed over an area of 238,000 sq. yards with an hourly consumption of gas of 47,000 cubic feet.

#### COMPARATIVE COST.

A Welsbach light consuming three cubic feet of gas per hour gives a light equal to 100 candles and at \$1.40 per 1,000 cubic feet costs 42-100 cent per hour, 42-10000 cent per candle or 23,809 candle hours for one dollar.

An ordinary gas burner consuming five cubic feet of 20 candle gas at the above price costs 7-10 cent per hour, 35-1000 cent per candle or 2857 candle hours for one dollar.

The present price of street lights is 9 cents per night for gas and 35 cents for electric arcs.

#### Cost of a 10 hour night:

Ordinary gas at 9 cts.=200 candle hours or 22 candle hours for 1 cent. Arc Light at 35 cts.=3000 candle hours or 85.7 candle hours for 1 cent. Welsbach light at 9 cts.=1000 candle hours or 111 candle hours for 1 cent.

The following table gives the number of inhabitants of some of the large cities of the United States per 100 candle power of street illumination:

San Francisco	40 inhabitants.
Boston	44 inhabitants.
Cincinnati	51 inhabitants.
Chicago	58 inhabitants.
Cleveland	65 inhabitants.
Buffalo	65 inhabitants.
New York & Brooklyn	86 inhabitants.
Baltimore	101 inhabitants.
Omaha	120 inhabitants.

showing that our city is better lighted at present than any of these cities.



## Public Ownership of the Water Supply of San Francisco.

BY CHAS. WESLEY REED, MEMBER BOARD OF SUPERVISORS SAN FRANCISCO.

The Board of Supervisors of San Francisco is at the present time engaged in an exhaustive, and the people of San Francisco trust, a useful investigation into the value of the Spring Valley Water Company's property in order to fix rates in February next. As a member of that Board, I cannot speak as freely as I will be able to do after the evidence has all been taken and digested. Whatever has been the result of the investigation thus far in assisting the Board in arriving at the true value of the Company's property, I can unhesitatingly say that it has strongly confirmed me in the belief that our City should own its own water supply.

Here are some of the reasons which make for public ownership:—

1st. The business of supplying water to the inhabitants of San Francisco is an essential monopoly. It would not be to the interest of the people of San Francisco to have a competing water company. In that case there would be two plants doing the work which one could perform, and the citizens would have to provide an income for two water companies instead of one. "It is recognition of this principle" says Prof. Ross "which impels the Massachusetts Gas Commission to allow no competing gas or electric light company in the state."

Water can be supplied more cheaply and reasonably by one large concern than by several small ones. Therefore competition cannot provide cheaper water. The only remedy is by public ownership.

2nd. It is a profitable enterprise, in which the people furnish the market. Without a market for the sale of water

the property of the water company would have no value. Let the people of San Francisco bring in an independent supply of water from the Sierras and the franchise of the Spring Valley Water Company would be worthless. It is of more importance in these days to control the market than to control the supply. The people of San Francisco are themselves the market for what the Spring Valley Water Company has to sell, and they should enjoy the profits of the enterprise.

3rd. Municipal control as provided by the constitution is not a success. It is a beautiful theory, but it works badly in practice. In a recent brilliant debate before the Merchants Association of this city, Mr. Symmes, an opponent of municipal ownership, lauded municipal control to the skies. He said "Our constitution requires the Supervisors to set the price which the private utilities shall collect for their water and their light. If the people are not well served, it is the fault of the public officials who make that price. \* \* \* \* Let me make the price on articles I buy and I care not who may own the stock."

But the Supervisors cannot give the time and attention necessary to place a just valuation on an investment of \$26,000,000. It requires a knowledge and an industry that no Supervisor at \$100 a month can give to the solution of this question. Besides, the work of one Board is not controlling on its successors. It is only when an extraordinary attempt is made to solve the question fairly and justly that the inherent difficulties attending an investigation can be appreciated. It yet remains to be seen whether they can be overcome. No matter what the Board does, no matter how many thousands of dollars it spends on experts, and how many hours of investigation it imposes upon itself, the next Board will in no wise be bound by its labors. Men not fitted by training and experience have to look into the question of fixing water rates

every two years and they are at a great disadvantage in coping with the experts of the water company who cloud every issue not favorable to the company's case.

Again, the Supervisors are warned on every hand not to injure the capital. Mere investigation is said to frighten away capital. Mr. Symmes after advocating municipal control complains, "The right to make these prices has given to each new set of officials a feeling that they must continue to save something to the people and reduce the rates. The same process cannot continually go on. San Francisco has reached "the danger line when capital is being driven away by this operation and when the corporations are ready to to the Courts for protection."

Coming as this does from a Spring Valley Water Company director, while an investigation is pending, it might be considered as a threat to take any water rate that might be fixed into the Courts, if it reduces the rate materially, however just the reduction might be. In other words municipal control is a good thing when it is not exercised, but when put in operation the Courts must be asked to protect the water companies in the enjoyment of their watered stock.

In looking back over the municipal reports for the past many years we find that there have been many reductions in the water rates to the people of San Francisco;—at least, the Supervisors passing the ordinances officially proclaimed the fact of a reduction, but an examination into the income of the Spring Valley Water Company reveals the astonishing fact that it has never diminished but has continually increased.

Again, any substantial reduction in water rates will be a serious blow to the many investors in the stock and bonds of the corporation. Take this fact so far developed in the present investigation. Over \$5,000,000 of money raised by the sale of the shares and bonds of

the Spring Valley Water Company represent speculative purchases of real estate that do not contribute one gallon of water to the use of the people of San Francisco, or property that has utterly depreciated and gone out of use, as decayed pipes and flumes, or polluted and abandoned water supplies. If that much be cut off of the valuation of the plant it will depreciate the stock to an equal amount. It will not injure the bonds which must be paid first. There are fourteen million dollars invested in the stock of the water company reckoned at par. Reduce the value of the Spring Valley Water Company by five million dollars and you take one-third off the value of the stock. It will be worth less than nine million dollars instead of fourteen million dollars. Most of this stock is held in San Francisco, and a great deal by women and children because it has been reckoned a good investment and men have left it to their families. Do you not see that a great reduction will result in serious injury to a large number of people and that the Supervisors may hesitate to squeeze that amount of water out of the stock when it works so much hardship to unfortunate and blameless stock holders? Municipal ownership would obviate these difficulties. There would be no squeezing of water out of stock to the detriment of honest investors upon whom the shares have been unloaded. Neither would the Supervisors continually meet holders of Spring Valley stock who were fearful of losing money by the action of the Supervisors, and thus powerfully influence the Supervisors to sacrifice the public welfare to that of their friends.

4th. The policy of the private water company is to get as high rates as possible in order to swell the dividends, while the policy of the municipal water company would be to get the most water at the least cost.

Some of the Spring Valley Water Company's largest expenditures have been made in great haste in the pres-



ence of an anticipated water famine, which could have been prevented had the advice of their own engineers been followed.

In early days it had a large and comprehensive plan to supply water to San Francisco. This included the utilization of the Calaverous water shed in Alameda and Santa Clara Counties. It could have doubled its supply of water at a cost of eight million dollars. Its engineers and the city experts agree on that. Pressed by the drouth of the year 188— the company threw a pipe line across the bay and secured a temporary supply from Alameda Creek. This led them to practically abandon the Calaverous reservoir (on the site of which large orchards are now growing) in order to continue the makeshift which it was obliged to take up under the pressure of a threatened water famine. Pressed likewise by the shortage of water produced by the last four comparatively dry years, the company is now spending large sums in the Sunol Valley to get a little more water to lessen the drain on its peninsula reservoirs. The company has spent more than eight million dollars since Col. Mendell made his report on Calaverous water shed, but its total resources of water are not greater now than what the company estimated its resources to be at the time Col Mendell made his report, to-wit:—30 million gallons of water a day. The tendency of a private company is to make as few purchases as possible, and to swell them up to an enormous valuation in order to provide large dividends without much outlay. The company then is obliged to issue watered stock in order to cover up the large profits which it makes on the investment.

On the other hand if the city owned the plant no such considerations would deter it from making the necessary enlargement when the need of it was pressing and unquestioned.

5th. The city can borrow money at least 2 per cent cheaper than the water company. We provided a revenue of

\$1,300,000 for the Spring Valley water company last year which is five per cent on \$26,000,000 of stock and bonds. The city could have borrowed money at 2 per cent less, saving \$520,000 a year. In forty years, which is the usual life of bonds in California, thus this saving alone with interest thereon would amount to over \$30,000,000, or more than the entire value of the Spring Valley Water Company's system at its own figures.

6th. Under public ownership the city would not lose the taxes which it now receives from the Spring Valley Water Company. This seems a hard point for some people to grasp.

According to the Supreme Court it is the duty of the Supervisors to provide in the water rates a sufficient sum to pay the company's current expenses, and a reasonable return on the actual value of its property used in supplying water. Repairs, salaries, taxes etc., constitute current expenses. Through the rates the city pays to the Spring Valley Water Company over \$180,000 a year with which to pay its taxes. The company pays \$180,000 back into the city treasury as taxes. About one-third of this goes to the State and two-thirds to the city. If the city owned the plant as it owns the city hall, it would pay no taxes on that portion of the property in the City and County. Now in computing the cost of municipal ownership the opponents of that policy never fail to say that the city would lose the taxes which it now received from Spring Valley.

Thus Mr. A. S. Baldwin, one of the most pronounced opponents of public ownership in San Francisco, recently published an article in which he declared that the city would lose the taxes under municipal ownership which would, according to his figures, amount to over \$10,000,000 in forty years. Of course this is a mistake.

If Mr. Baldwin will stop to consider he will realize that if the people raised \$180,000 as rate payers with which to

pay the taxes of the water company and then receive \$180,000 back from the water company in the form of taxes, it is the old story of robbing Peter to pay Paul, or of taking a dollar out of one pocket to put into the other. The city is neither richer nor poorer by the operation. It makes no difference to the citizens whether they pay \$180,000 to the Spring Valley Water Company for taxes, or whether they pay it directly into the city treasury. If the city needs that \$180,000 for the expense of the government it is just as easy for the citizens to pay that sum as direct taxation into the City and County treasury, as it is to pay it indirectly in the form of higher water rates into the treasury of the water company. The burden of the Spring Valley water company's taxes, rests now upon the rate payers, and not on the company. Under public ownership the burden of raising that \$180,000 would remain just where it is now—on the people at large, except that the State taxes would be saved. If the Spring Valley water company's taxes in the city be placed at \$180,000, municipal ownership would save \$60,000 annually. The burden of the remaining \$120,000 would be transferred from the people as rate payers to the people as tax payers. Incidentally water would be supplied at \$180,000 less cost annually to consumers.

7th. In the next place all the private companies of the state manipulate their books so that the entire cost of replacing pipe and other perishable property is born by the people under the head of current expenses. Our Supreme Court has declared that depreciation must be born by the public service companies; nevertheless the Spring Valley water company has so far prevailed upon the city legislature to provide a sufficient sum of money in the rates to repair all depreciation.

I quote from the testimony of Secretary Ames of the water company.

Q. Suppose that any given portion of your system does not require enlarge-

ment, every time a portion of it wears out and it is replaced, all that is charged to maintenance, is not that so?

A. Yes sir.

Q. Then when the whole works have been replaced, still without any increase in its size or change in the engineering, but simply replacement, the whole cost of replacement would come out of the rates and not out of the stock or bonds, according to your system of book keeping?

A. Yes sir.

This testimony will be found at page 190 of the records of the present investigation.

Taken in conjunction with the fact that the engineering experts agree that the property of a water company will wear out entirely at the end of a period variously estimated at from thirty to fifty years, it is evident that the citizens of San Francisco will ultimately pay for the entire cost of the tangible property of the Spring Valley Water Company without owning any of it. This has been going on for 40 years, and a great deal of the property of the company has entirely been replaced at the cost of the citizens of this municipality. Does not this prove how woefully lacking municipal control has been? Should not the city own the plant since the citizens are paying for its gradual reconstruction?

8th. Lastly, the cost of water under private ownership is too high. In San Francisco water costs \$2.11 for a million gallons, while it costs the people of New York \$29.07. The Spring Valley people claim that peculiar conditions in San Francisco make it more costly to supply water here than elsewhere. Granted, but does that explain why the people should pay seven times as much for water as the people of New York, for there they also have reservoirs, expensive water sheds and long aqueducts, pipes and canals?

The trend of the large cities of the United States is towards public ownership. This of itself is a very strong argument in favor of that policy. Of



the 50 largest cities of the United States 41 own their own water plants. This shows what the experience of other cities has been. If San Francisco were guided by the experience of others, she would provide herself with her own water system.

Under public ownership in the United States the cost of water is 40 per cent less than under private ownership. On this point I quote the report of the Merchants Association of New York when urging that city, even under Tammany rule, to adhere to public ownership as against private. With this quotation I will close my paper.

"The experience of other municipalities in the United States, as well as in other countries, shows an almost continuous tendency to substitute publicly owned water systems for private, a tendency so persistent and so universal, and of such constantly increasing force, that the wisdom, in the public interests of the policy of municipal ownership and control of water supply, would seem established by abundant experience.

"In 1800 there were sixteen plants in operation in the United States, of which fifteen were private and one public. Since that time fourteen of the fifteen have become public. At the close of 1896 there were in the United States 3,196 water works; of these 1,690 were under public control, 1,489 under private control, twelve were under joint control, and of five the ownership was unknown; in other words, in 1800, 6.3 per cent were public, 93.7 per cent were private; in 1896, 53.2 per cent were public, 46.8 per cent private. Similar conditions prevail abroad, notably in Great Britain. In London a strong movement is on foot to replace with a public service the inadequate and unsatisfactory supply of the private companies which have become enormously wealthy from their monopolies in the various parts of the municipality.

"The cost of the private plants throughout the United States and

Canada (excluding the Pacific Coast, where special circumstances render the comparison unfair) is slightly less, some three and one half per cent, than the public. This slight increased cost of public over private may be due to the care taken by municipal authorities to keep the sources unpolluted; in other words, to the cost of lands bordering on streams and ponds, as in the case of our consumer is almost always less than under private ownership. The average cost per family throughout the United States is, for public, \$21.55; for private, \$30.82; that is, privately supplied water costs about forty per cent more than that supplied by the municipalities."

### Street Cleaning.

By JAS. D. MINER, Councilman, San Jose.

How to keep the streets clean has been a perplexing question. The changes in administration, and perhaps laxity of officials coupled with the fact that sufficient money can not always be set aside to do the work properly, are factors largely responsible for making the question a seemingly perplexing one. I believe that no money spent by municipalities is as much appreciated by the tax payers and citizens generally, as that which is spent upon the streets, and no act is more commended than that of keeping the streets properly cleaned. It is a matter that demands the close and personal attention of some official who will be interested in seeing that the work is successfully done. The different seasons and climatic conditions each present a different phase in the methods to be pursued and one day is no criterion for the method to be pursued the next. For many years San Jose has been swept by machine at night and the result was very unsatisfactory, particularly in the business portion of the City. The streets were always dirty in the day time when we needed them clean the

most. We decided to try the hand system. To say that it is entirely satisfactory, would be perhaps saying too much, but I may safely say, it is a vast improvement over our former efforts with a machine. It would be entirely satisfactory, were it possible to increase the expenses, by adding more men and shortening the districts. The thing most essential to the success of the hand system, is the employment of good reliable men and continuing with them as long as they will stay. We find that such men take pride in seeing that their district is in as good condition as their neighbors. We have exactly the same force we started with eighteen months ago. New or temporary men are absolutely worthless for this work, as it takes at least a month to work to advantage. When we started the system we offered a cash prize to the man who kept his district in the best condition for the first month. They all tried to win it and the result is they have never fallen behind the standard set at that time. It is very essential to have the right kind of tools. A broom made of fine rattan inside and split bamboo on the outside rows, is the only thing worth having. Also have an old worn down broom on hand for wet streets as the new brooms are too limber when wet. Use a steel scraper when the dirt is thick and sticky. We have provided the men with gum suits and hats and require them to scrub the streets and gutters while it is raining. The only complaint we have had from the hand system was on account of the dust the men raised in sweeping. Having such large districts the men could not take time to use a sprinkling can and a sprinkling wagon made it so sloppy they could not sweep and the question of the dust was a very serious one. We finally discovered a sprinkler attachment for a wagon that would throw about the same amount of water as a hand sprinkling can, and we have no more trouble from that source. One wagon sprinkles for

all the men. He does not sprinkle the whole street, but just keeps a half block ahead of the men all the time. We have eleven men employed in sweeping, divided into two classes. Inside men and outside men. Seven inside men each have 9000 square yards to care for in the business district daily. The four outside men have double the amount namely, 18,000 square yards to care for in the residence districts, but they only sweep half the first day and the balance the next day. So the business districts are swept continuously every week day, and the residence districts only every other day. We use the sack and carrier system, and one wagon picks up the sacks of manure and returns the empty sacks to the sweepers. The men sweep the entire surface of the street on the first time over in the morning and the balance of the day is spent in picking up the droppings. Our men are handicapped, because our gutters are made of Basalt blocks and are from four to six feet wide and it requires a large amount of extra time to keep them clean.

I am convinced "When the funds of a municipality will allow it," that a special force should be employed to clean the streets efficiently very early in the morning, and then have your regular day force employed only in picking up the droppings throughout the day. With this addition to our system, I think it would be a perfect one. Upon wet days we abandon the sack system and the dirt is scraped into piles. These days an extra pick up wagon is necessary, so we require the sprinkling wagon driver to drive this extra wagon. No sacks or piles are allowed to remain upon the street over night. We have 141,386 square yards in our bitumum system and the total cost per year is \$7,800 or 5½ cts., per square yard.





### Hints For Clerks.

By Mr. M. L. Hascom, City Clerk of Berkeley.

Mr. Hascom: Gentlemen of the League: I was a little at a loss to know exactly what would be expected of me in this short talk. It is possible, however, that there may be something in the performance of my duties in Berkeley that will be of interest to you. So I will preface my remarks with a statement of the conditions that prevail there.

Berkeley has 13,000 inhabitants. It has the area of Oakland, and an assessed value of about nine millions of dollars.

Its tax rate is limited to 75c for general purposes. In order, then, to make the work effective, the greatest economy has had to be practiced. The Board of Trustees consists of seven members, one elected from each ward. They are all business men, employed in San Francisco, and devote at best but a very small portion of their time to their business in Berkeley, most of which is in the evening. The work of the Board is extremely arduous to them, and it is necessary to help them in every way to economize their time and in the expedition of their business. For that purpose, when, five years ago, we adopted the charter under which we are now working, an effort was made to place the matters on which the Council would have to act in such shape that they could act with intelligence, and that they would be in the possession of all the facts necessary for them to act upon. The first proposition was in regard to the presentation of matters which should come before them at each meeting of the Board. For that purpose they passed an order that all communications and all matters that were to be brought before them should be presented to the Clerk by 4 o'clock on the day of the meeting of the Board. As soon as that hour arrived and I knew what was to be presented, I had a typewrit-

ten program made out and duplicated so that every member when he took his seat had before him all the work that he was to act upon. That was found to be a very efficient and helpful way for them to get through a great deal of work in a very short time. As many as 75 different measures have been acted upon in two or three hours of session. For another thing, the reading of the minutes was found to occupy quite a time, and I devised the method of mineographing the minutes of each meeting and sending to each member of the Board, and I have also arranged it so that I can print the same matter in my record book exactly as sent out to the members of the Board. When the members received these copies, they knew exactly what the minutes were, and read them over at their leisure at their homes, and so were better prepared to state whether they were correct or not and to point out the errors or omissions, than if they had waited until the meeting. That was found to save a good deal of time and to insure a great deal of accuracy in the records.

In order to help the Finance Committee, an order was issued that all bills or claims against the departments to be acted on at a meeting must be presented to the Clerk on the Friday before the meeting. As soon as those bills are in, I go through them and see that they are in proper shape, and on Friday or Saturday evening they are taken to the Finance Committee, and I am generally present, and along with them a book in which are entered with their proper voucher numbers all of the claims that have been previously audited and passed, so indexed that the committee have at their command a complete record of what has passed through their hands before, indexed to date, so that they can easily satisfy themselves whether the claim has been duplicated, or not. As soon as those bills are returned to me on Monday, I make a list of them on a form, and that is signed by the committee and by the

Mayor, and those bills are passed by them at the meeting almost invariably as recommended by the Finance Committee. Also, on the same day, before the meeting is held, I enter all the bills in an account book, which I will explain further, and segregate them, and at the same time I make out all the warrants, and they are signed and ready for delivery, except the signature of the President of the Board. During the meeting those warrants are signed, after passage, and the next morning they are ready for delivery, and any man can get his money immediately. All of the accounts of the city pass through my hands, and I am Secretary of the Board of Education, ex-officio. And I have adopted a method of keeping the books that all business men employ, which is simply a double entry system. I enter everything on a journal and it is so entered that it appears on both sides of the Ledger, and it is posted from the Journal. The advantage of that is, first, that it is perfectly accurate, because there is proof of its accuracy by taking a trial balance, and secondly, it is flexible. In almost all of the systems, there is used what is called a multiple ledger, and the difficulty there is that it has no flexibility. You can have only a certain amount of segregations without the multiplying of books. With this system, I can have a hundred or five hundred, as I see fit, and I do not waste any books. I have thirty-eight segregations under the General Fund, thirty-seven under the School Fund, and all together perhaps two hundred different accounts. Those being entered and segregated at the same time, it is possible for me to tell at any moment exactly the amount expended for any one of those accounts. I can make out my yearly or quarterly report in a couple of hours at any time. Every month I compare my books with the Treasurer's, and if any differences occur, we reconcile them, and in the six years that I have been Clerk, we have kept our books precisely alike.

An expert goes through them, and it takes him perhaps a week to go through the work of two years and check it up.

The records are kept in private place, and I have an index for resolutions, an index for ordinances, an index for the minutes and an index for street work.

The street work is a matter of more importance, and requires more knowledge, probably, than any other part of my clerical duties. I have to keep those records in shape, of course, in a register, which is a large book, so that on two pages you have a brief record of every page of the proceedings, and I can tell at a glance exactly how and when the next step must or can be taken. The documents relating to street work are all filed together, and with a large index, also, of all those steps, and when all the movements are made. Resolutions relating to street work for the same piece of work are all known by the same number. For instance, the resolution is No. 5, and also the award of the contract and so on. That is quite a little advantage.

The matter of index is one of the most essential parts of any office work, because if it is an effective index, it places at your command any information you want without any loss of time. The index that is generally adopted now is the card index, which is better than the book index, because of its flexibility. It can be extended to any point found practicable, and I shall advocate, if I continue in the office there, the adoption of a card ledger, for the same reason, that you can accomplish the work in very much less time than you can with an ordinary book. It is a self indexing affair. In the same way, many of the files of the office are self-indexing. Bids, for instance, can be put together in such a way that cards separate the details of the competition alphabetically.

As you can perhaps imagine, the work, in a town in which the revenues are about, in the school department



\$75,000 a year, and in the other departments of about \$45,000, with an expenditure at present of \$100,000 a year for school buildings, and our bonding work (we passed successfully a bond issue and have done this year about \$250,000 worth of street work), amounts to considerable. And in passing I may say that nearly all of the street work has been done under the Vrooman Act, and we have had no difficulty in getting bids, and we have employed nearly every phase of the Vrooman Act; that is, we are doing some of it under the district plan, and some of it under the front foot plan, and we have no difficulty. Some of it has been done by private contract, and the difference in price between the two is very little, so that I am confident that with proper care and a knowledge of the law, it is perfectly feasible to assure a contractor that he will get his money. In the five years that I have been there, there have been only a few suits, probably half a dozen, that have come to trial, and I think in every instance the contractor has been awarded his money.

The Chairman: You prepare all the orders of intention, and all the papers, and everything of that sort, for the Board?

Mr. Hascom: We have a method that I have advocated to insure accuracy and the Board has adopted it, that the resolution of intention and all papers relating to street work, shall be prepared by the engineer, O. K'd by the Superintendent of Streets, and then it passes through my hands, and very frequently it passes through the hands of the City Attorney as well. (Applause.)

### **Municipal Concerts.**

The Chairman: The next in order upon the program is "Municipal Concerts," by D. O. Druffel, of Santa Clara. I believe he is not present:

Mr. Lanborn: Perhaps Mr. Mason can tell us what that means. We have concerts sometimes in our Board across

the bay, but they are usually contests, so I thought this might possibly have been a printer's mistake.

Mr. Mason: The town of Santa Clara, during the last summer, has had a series of open air concerts in the city park once a week, and has paid for them entirely out of the municipal fund. That entertainment was initiated by petition of the taxpayers of the town, the heaviest and most representative men in the community asking that the Board appropriate a sum of money to defray the expense of the concerts. Heretofore the business men have clubbed together and put in a thousand dollars, say, to pay for the concerts. But there was complaint that it was hard work to collect the money—harder than to furnish the music. So this plan was adopted to obviate the difficulty. The practice has been a very successful one, and we have had very fair concerts. We have had different bands, and some vocal concerts, and it has been very interesting and satisfactory to the people of Santa Clara.

Mr. Kincaid: Redwood City has concerts during the last two years. There we have a band, and the town pays part of the expense, not the whole of it. Part of the expense is paid by the town and the balance is collected from the business men around the community.

The Chairman: Have you any special authority for doing that, under the charter?

Mr. Kincaid: We have none at all, but there has been no objection to it.

Mr. Devine: For several years Sacramento has given the people concerts twice a week. We have what is known as the Immigration Fund there, what might be called the Contingent Fund, and we appropriate from it for all purposes, one of them being for these concerts. For a time the merchants put up considerable money in order to see that we had two a week. Last year we did not appropriate anything at all from the city treasury for that purpose.

Mr. Bayley: I would like to ask some of the City Attorneys here whether they have ever investigated the legality of such a thing in cities of the fifth and sixth classes?

Mr. York: We are operating under a city charter, but not a freeholders' charter. The question was referred to the City Attorney there, to the sorrow of the people who had referred it. The custom had been carried on for a number of years of appropriating so much each month towards keeping up a band during the summer month, until some inquisitive Councilman wanted an opinion upon it, and I think I very carefully covered the field of investigation. The law, as I understand it, is that unless in the charter itself there is provision, you cannot appropriate money for such purposes as concerts, encouragement of the Fourth of July, and so on.

Mr. Lanborn: We had concerts in Alameda for some time, but the expense was always charged to Park, Flowers and Gardners, and a similar plan has been adopted in several other cities in the State that seem to be not represented.

Mr. Spinney: We do a little business of that kind in Fresno. We have a general fund and draw our warrants upon it for that purpose, and our people are satisfied.

### Oil For Streets.

A. E. Brock, Trustee, City of Redlands.

Mr. President and Gentlemen: I can tell you in a very few moments how we have gotten along in the last two years in the use of oil upon our streets. We have found it a great success. It has, in fact settled the question of dust with us. Two years ago, when we adopted the plan, water was very scarce, and that moved us to try the experiment of using oil. We have not a single complaint from any person in the town in regard to the use of oil. It has satis-

fied everybody much better than water, and, what is one of the best features of it is, that, when the rainy season comes, it protects our roads and keeps them in better condition than would otherwise be the case, by putting a coating upon the streets. One objection that was raised to it was its getting on ladies' dresses and bicycles. But all of those objections have been practically settled. There is nothing whatever detrimental in the use of oil in the streets, and the more we use it, the more we think of it, and there is no doubt that we will continue to use it instead of water. Moreover, we believe it is cheaper than water. The oil has to be heated, and is put on hot. The oil is applied with a patented machine about six feet wide, and on top of it the machine puts a little dust—it works better where there is about an inch of dust on the street. It wants to be put on in hot weather so that it runs better and spreads right out. Then in a day or two you can drive right over it. In the first place, we applied it on one side of the street and put up barriers so as to keep people off from it, but now we do not do that. We simply let them drive over it if they want to. It will stick on the wheels of a wagon for a day, but after that you don't notice it at all.

The Chairman: How often do you sprinkle the streets with oil?

Mr. Brock: Three times a year will keep the dust down.

Mr. Phelan: It is not applicable to an asphalt street?

Mr. Brock: No. It would spoil the asphalt. In the center of the town we have asphaltum, and we keep the oil away from it. We paid in one year \$4424, including \$15 a mile royalty for the use of the machine on a total of 18 miles of street, and the sprinkled space was 18 feet wide on some streets and on some 12 feet wide, the sprinkled area being 95,000 square feet:

Mr. Phelan: What do you do with the dust on the sides of the street?



Mr. Brock: It runs out and covers it all.

Mr. Phelan: What quality of oil do you use?

Mr. Brock: A poor grade of oil, with an asphaltum base. The price of it is varied, the first we bought being \$1 per barrel, and now it is \$1.25. Another thing I would like to mention is that we have had no difficulty at all in collecting from the property-owners two cents a foot on each side of the street, while the total cost is eight cents per foot.

Mr. Hansen, of Berkeley: I would like to state, Mr. Chairman, that the experiment of oil for street sprinkling has been used in the Bost Park system, and they have found it of such advantage that they are going to extend it. The one objection to it is the rank odor, which will last all the way from four to six weeks.

The Chairman: The next subject is "Oil for Fuel," which was to have been discussed by Mr. Sorrenson, of Modesto, who, I am sorry to say, is not with us, to the regret of those who remember his active part in the convention of one year ago.

Mr. Devine: Last Monday evening, Mr. Chairman, Sacramento received bids for fuel oil, and the bid was something like \$6000 less, as a lump sum, than the bid for coal.

The Chairman: Are your boilers for oil?

Mr. Devine: We had a bid of about \$2400 for making the transformation necessary to prepare the boilers for oil. I think it will be a good thing, and I think oil is the coming fuel.

### What Trees for Streets.

By PROF. J. G. LEMMON, Councilman, Oakland

What trees shall we plant along the streets of California towns?

The answer must be as varied as the needs of the several communities; and these needs will be found to result from

the locality, the position of each town, for the locality determines the climate in a measure, and the climate dictates mostly, the character of the trees to be used.

The long State of California skirting the Pacific Ocean for 800 miles in a nearly north and south direction, crosses  $9\frac{1}{2}$  degrees of latitude—equal to the distance between Boston and Savannah, London and Madrid, St. Petersburg and Rome. We should expect a wide difference in the climate of the northern part of the state and the southern.

The cross range of the San Miguel and San Bernardino Mts. sharply divides the climatic characters of the two regions, giving us Southern California with its semi-tropic climate and the much larger Northern California with a semi-temperate climate. But the difference between the climate of these regions is not so great as position would imply; owing to the presence of a remnant of the Japan warm current which crossing the North Pacific Ocean strikes the Alaska peninsula and a part of it is deflected along the northern coast and as far south as Point Conception. This current warms the air above it and fills it with moisture which the ocean wind that prevails along the coast for great part of the year carries inward and deposits in abundant showers and frequent fogs upon the coast for quite a distance inland.

Opposite conditions of colder temperature in the interior mountain region of Southern California intensify the degree of difference in temperature of these interior regions and so give us, in all, four primary, climatic regions in the state, two on the coast and two interior; or, dividing by the mountain range mentioned, two at the north and two at the south.

Of these regions the two interior are the most diverse in climate, the interior towns of Southern California having the hottest summer climate of any in the state, while interior northern towns on the mountains have the coolest winter

weather. On the contrary the two coast regions are so nearly alike in temperature that many of the same palms and other semi-tropical plants of Southern California thrive freely in the cities around San Francisco bay and northward to Crescent City, as also inland to Stockton, Sacramento and in the lower portions of the river canons between the western slopes of the Sierra.

Now, what are the needs, in the way of trees and shrubs, of the towns in these four regions? Obviously the southeastern towns scorching and smeltering under a semitropic sun, with little or no alleviating rain or fog, require shades and screens, in addition to their hand-made balconies and bowers.

As a general statement then, these towns need and may luxurate in strong growing trees having large leaves and plenty of them. Hence, Southern Cal., is the adopted home of the palm and vine, the Magnolia and Catalpa, the Linden and the Rubber tree.

In Northern California the large, broad-leaved, dense foliaged trees are undesirable and their use for street planting makes damp and muddy streets, for a great part of the year; besides they obstruct the welcome rays of the sun—never too warm in the coast towns. This is the fitting region of the comparatively small-headed palms, the thin-foliaged conifer trees, the birches, maples, laurels and a host of lovely flowering shrubs.

Descending to details, added to conditions of temperature and moisture, the strength and prevalence of winds and particularly the direction of the streets are important conditions. Any region subject to strong winds is unfitted for trees with stiff unyielding branches, as well as large and numerous leaves. In tropical islands frequented by hurricanes, the young palms with their soft, limber trunks are borne down nearly prostrate while the leaves split to narrow ribbons are neither removed nor injured by the furious gale. When

the hurricane has passed the palms slowly arise to position unharmed. If perchance old trees with stiff trunks are present, they are snapped off and carried away—one of nature's ways of providing room for betterments.

Streets running north and south may often admit of much ornamentation because the sunlight may reach the street during the warmest part of the day, but east and west streets, can bear but few trees and those of the small sorts on the northern side.

Some kinds of trees have such faulty habits that they are unendurable; of such are those that sprout freely at the base, or that seed abundantly, making a great nuisance. Trees that have strong surface roots uplifting sidewalks, and those that perforate sewer pipes—as at present placed at street sides—are objectionable.

#### GENERAL QUALIFICATIONS OF TREES.

Chief of the trees suitable for most of the towns in California are those of the large family of palms, varied in appearance from the stately and large-leaved fan palm—the Washington Palms of the Colorado desert to the long-leaved *Dracena* and the little wooly stemmed *Chameorops* of the Orient. In this connection, it is not very surprising that the Washington Palms born in the hottest ravines of the low Colorado desert flourishes finely not only all along the California Coast but interior to the slopes of the Sierra. It is this magnificent tree with its large smooth, columnar trunk and its high-raised and comparatively small crown of few large spreading leaves that gives to our cities a foreign appearance, and largely helps California to claim for their state a semi-tropic climate.

Inexperienced persons or those desiring to realize on their investments too soon, often make the mistake of planting their trees in unfitted ground, or too close together or without alternate species—when such alternation would be most pleasing; also they plant trees



that become too large. Too close planting may be rectified by cutting out and often the ground may be improved after planting, but better consult an experienced landscape gardner and begin work correctly. No private citizen should think that he has the right to plant what he pleases on the street before his own property and as he pleases. He should be reminded that the general effect, as well as in the special appropriateness of his acts. The street lights are common property and should not be obscured, nor should beautiful grounds and attractive buildings be screened from view.

Happy alternations of trees of different characters or standed trees alternating with beautiful flowering shrubs are common in well-cared-for cities—and in such cities trees that become large or unsightly with age are never planted. However, certain streets of a town may be lined with but one kind of tree—giving it a special name as Palm Avenue but variety is generally best.

Now, having indicated in a general way the characters which trees should present for street decoration a greater problem confronts us—it is thus:

#### WHAT STREETS HAVE WE FOR TREES?

How many miles of streets suited for tree decoration have we in California? How many blocks in San Francisco, Los Angeles, Oakland, Sacramento, and San Diego? In two or three smaller towns where esthetic, tasteful counsels have prevailed from the first, we find broad streets laid out in anticipation of the attraction of tree-planting, and we see that the end was most successfully attained. Witness the splendid appearance of State Street in Santa Barbara, grandly bordered for a mile or two with palms and pepper trees; and the superb Magnolia Avenue at Riverside with a row of those royal trees through the middle and others at the side. The superior attractiveness of those Magnolias, with their large shining leaves and immense, snow-white

flowers appearing during the winter months, is conceded by all visitors to Southern California.

It is very fortunate when a young town well situated for street decoration, is blessed with a governing body that provides wide streets, and it is most fortunate when supreme, arbitrary power is placed in the hands of one person possessing the wisdom and courage to lay out the streets and parks properly. All the world knows the grand work of Boss Shepherd who rescued the inchoate town of Washington from a disgraceful condition and made it the most beautiful and attractive city on the face of the earth.

Albeit, the well deserving Alexander H. Shephard made so many enemies in his strenuous opening and widening of streets that he had to flee from the promising capital city which his genius had created and take refuge in the mountains of Mexico.

Vastly different was the treatment of M. Alphand the similar benefactor of Paris whose recent funeral was celebrated with imposing ceremonies exceeding those of any citizen of France except Victor Hugo.

And there is hope for the future of some of our California towns. Witness the example of the city fathers of San Francisco providing a way for the intelligent voters to demolish a dozen blocks of buildings between two streets and to establish instead the Golden Gate Park Extension down to the city's most magnificent, cross-town street—Van Ness Avenue. The wisdom and courage to do this argues the ability to do more, and perhaps, led by such a genius as Supt. McLaren the grand series of decorated boulevards planned by Mrs. Hearst may soon be seen ramifying the fifty square miles of this fortunately-situated western city, of which many grand achievements are predicted during the Twentieth Century, including the commercial domination of the entire Western Hemisphere.

And what of Oakland, beautiful Oakland? Situated on the right side of the bay, (in view of the room for unlimited expansion) and with excellent manufacturing, commercial and shipping facilities, she enjoys the superlative advantage of a mild, salubrious and nearly equable climate summer and winter. Oakland now 5 by 8 miles in extent, expands one wing across the harbor southward, to the City of Alameda, the other northward, unobstructed to the limits of Berkeley, while her beak extends out over the rich plains towards Haywards, presaging the near at hand event when all these thriving municipalities will be united forming Greater Oakland. Largely assisting in this consummation is the fact that Oakland possesses a dozen noble thoroughfares 80 to 100 feet wide and one mile to six miles long, laid out by her wise founders nearly half a century ago.

While some of these avenues extend eastward, the most of them run northward to the University town of Berkeley and its environs; hence they will always be much used; and, most fortunate their direction being nearly north and south, fits them for ample decoration with trees of many kinds; also Oakland is about to establish a series of large, public recreation parks connected by other boulevards.

Many other cities of California have similar usable thoroughfares and park-sites while more cities should and will have them. Municipal officers all over the state should at once awaken to the great fact that whatever truthful statements may be made concerning the attractiveness of noble buildings and large manufacturing establishments, the paramount tendency of the times is in the direction of providing ample, flower-strewn breathing places for the toilers in shop and factory, as well as abroad, tree-decorated boulevards for citizens in all the walks of life.

Failing in securing these municipal necessities, citizens of slow towns must

continue to witness the frequent flight of their tired workers and persons of leisure to some progressive, prosperous town, there to spend their money and influence in making that city more prosperous. Furthermore, they must not expect to find wealthy persons coming to invest money in their sleepy towns.

#### TREES AND SHRUBS RECOMMENDED.

In Southern California, besides the natives of the region and others named in preceding paragraphs, others are recommended by Mr. C. H. Shinn of the Agricultural Department California University, to wit:

European Sycamors. *Platanus Europea*, a very hearty tree enduring a dry, arid or alkaline soil; the soft-leaved *Acacia mollinina*, is well liked with others of this beautiful flowered family; and many other rare and beautiful trees and shrubs the names of which he will gladly give on application.

For Northern California, J. Burt Davy of the same Department recommends for east and west trees, European White Birch, *Betula alba*. Maidenbair Tree, *Ginkgo biloba*. Bald Cypress, *Taxodium distichum*, the *Catalpa speciosa*, the *Paulonia imperialis*, the Horse Chestnut, the Texas Pecan, the Texas Umbrella Tree, the small-leaved Maples, the Kentucky Coffee Tree, the Box Elder, etc. For north and south streets, the English Hawthorn, Holly-leaved Cherry Irish Yew, Box Tree from Brisbane, the Shiny Privat, etc., added to which I will again suggest the various species of hardy palms on account of their small heads and exotic appearances with a few of our smaller native conifers, often alternating with other trees and especially with such shrubs as the English Hawthorn, our Christmas Tree, the Syringa, Snow-ball, Fremontia, Tassel Tree, etc., etc.





## Practical Working of San Francisco's Charter.

By JAS. D. PHELAN, Mayor of San Francisco.

"San Francisco is a very appropriate place in which a League of Municipalities may hold its convention because in this City during the last year there has been on trial the most advanced City Charter that has been given to any American municipality and its success means much for the people immediately benefitted and much for the people of other communities who may profit by our example.

"The people adopted the Charter in order to secure Home Rule, a more responsible, efficient and economical government and to introduce and establish what is known as Civil Service Reform. I am disposed to believe that the claims made for the Charter by its friends in this behalf have been made good so far as the Charter controls.

### HOME RULE.

"The City has put on its own government. The Legislature, as formerly, cannot interfere with our municipal affairs. The power of appointment has been transferred from the Governor to the Mayor and the Supreme Court has now before it 'The County Officer's Case,' so called, by which the spoilsmen, that is to say, the proponents of the 'Spoils System,' are endeavoring, to put such officers as that of Sheriff, Assessor, County Clerk and Justice of the Peace, Coroner and Recorder under the control of the Legislature and take them out of the jurisdiction of the Civil Service provisions of the Charter which is distinguished as the 'Merit System'; but whatever may be the result of this litigation, substantial results remain because the Civil Service will continue to apply to the employees of city officers, as defined in the case of Kahn vs Sutro, and to the subordinates of the Boards and Commissions appointed by the Mayor.

"The City is in many respects the agent of the State, and the Charter provides, under a fair interpretation of the Constitution, for the performance of our State duties as required by general law with our own servants, whose election, compensation and the number of whose clerks and the manner of whose appointment should be controlled by us, and we look for a favorable decision on these lines.

"Before touching on the general character of the government, consider for a moment the results of Civil Service Reform.

### CIVIL SERVICE REFORM.

"The Commission has classified the entire Civil Service of the city, made rules, printed instructions, conducted examinations, and have already certified 569 employees to the city departments, where, according to letters from the several Boards, from the Recorder, County Clerk and Registrar, they are entirely satisfactory. This was an enormous task which has been done well with a trifling expense of about \$5,000. There are sixty-seven classes of employees for which there must be separate examinations, included under the heads of clerical, mechanical, custodian, engineering, medical, police and fire. The result is, that the city and the employee are both protected, and the political 'boss' who thrives on patronage is destroyed.

### RESPONSIBILITY, EFFICIENCY AND ECONOMY.

"Responsibility comes from the powers given to the Mayor and the separation of legislative from executive functions.

"Under the Charter, the Board of Supervisors is a purely legislative body, no patronage being within its gift except its own clerks and attaches. Under the Consolidation Act, the Board appointed gardeners, police, court clerks, prosecuting attorneys and janitors; and its confirmation of the appointment by the Mayor of the License Collector was

required, Scandals frequently grew out of the disposition of this patronage.

"The Consolidation Act, adopted in 1856, divided the city into twelve districts or wards, from each of which a Supervisor was elected. All of these wards except two were in that portion of the city east of Larkin Street and Ninth Street, and a representative Board was rarely, if ever, secured. The Charter wisely wiped out ward lines and gave a wider field from which to select the Supervisors, with the result that no better Board than that now serving ever sat in the City Hall—in fact, it is the best Board of all.

"There is another noteworthy circumstance about this Board of Supervisors, and that is, contrary to the pernicious custom of many years, no ring or combination composed of a working majority has been formed and until the votes are counted the result of a ballot cannot be forecast. Heretofore, it was common to hear of 'solid sevens' and 'solid eights.' The number of Supervisors have been increased from twelve to eighteen, and now, it will require a combination of ten votes to carry any measure and fourteen votes to overcome the Mayor's veto. While the Charter makes a combination therefore more difficult than in former years, still the freedom of the Board from cliques and rings is due to the character of the Supervisors.

#### ORDINANCES.

"In prescribing the manner of the passage of ordinances, the Charter framers adopted the constitutional provisions requiring the subject matter of every measure to be expressed in its title and limiting every ordinance to one subject. No such restriction existed under the old system and vicious legislation was frequently the result.

"Every ordinance, except those which authorize the expenditure of less than \$200, is subject to the Mayor's veto. The limit under the Consolidation Act was \$500, nor could the Mayor, as now,

veto the tax levy or any item thereof; and a wasteful majority in the Board could, and frequently did, deplete the Treasury after fixing high and exorbitant rates.

#### CONTRACTS.

"At the beginning of each fiscal year, every department of the city government is required by the Charter to specify to the Supervisors the various articles necessary to be purchased for the ensuing year, including stationary, and the probable quantity thereof to be required. It is thereupon made the duty of the Board to invite bids to supply the various departments, the advertisement for bids to be made by schedule. Bids may be made separately for any article. All supplies are now being furnished upon bids so invited, and a saving over the old system is thereby effected. Take as an example the matter of stationary, which cost \$40,000 last year as against \$24,000 this year. It was the practice under the Consolidation Act to purchase many supplies in the open market, no provision of that Act forbidding it, and jobbery and extravagance were common. A new provision of the Charter requires that all stationary be kept by the Clerk of the Board of Supervisors and delivered to departments on requisition of head of department countersigned by the Mayor.

#### GAS AND WATER RATES.

The Board affected during the year a reduction of ten per cent in water rates to householders, a net saving to the consumers of the city of \$150,000 a year. The Charter required that the rates for both public and private use of gas, be fixed by the Supervisors and that body reduced the consumers' rate of gas from \$1.50 to \$1.40 per thousand cubic feet, a saving to them of \$100,000 per year; so in these two items, the people have benefited to the extent of a quarter of a million dollars. For the first time in our history the Supervisors set the maxi-



imum rates for public lighting. The rate for the improved gas lamp is nine cents per night; formerly it was eleven cents. The rate for arc lights used by the city was reduced from 42½ cents to 35 cents per lamp per night, and the price of gas for public buildings was fixed at \$1.35 per thousand cubic feet. For private consumers for electricity a maximum rate, with a sliding scale, was fixed by Ordinance No. 49, all of which represented a substantial saving to the public.

### FUNDS AND APPROPRIATIONS.

"Perhaps the most marked innovation introduced by the new Charter, and the most beneficial to the taxpayers, is the scheme of funds and appropriations therein devised. Formerly all moneys received from taxation and other sources were apportioned to separate statutory funds, known respectively as the General Fund, the Park Fund, the Street Light Fund, the Street Department Fund, the School Fund, and the Interest and Sinking Funds. The bulk of the revenues went into the General Fund which was drawn against indiscriminately to pay salaries and bills for supplies furnished by contractors. Now no demand can be drawn except upon a specific unexhausted appropriation made by the budget in June. Salaries were under the old system held by the courts to be fixed charges, and were given precedence over claims arising out of contract. While, as a matter of law, contractors were charged with notice of the condition of the funds and were not protected if they were overdrawn at the time they furnished supplies, in practice they were in the dark. The result was that the fund was invariably overdrawn and many creditors remained unpaid at the end of each fiscal year. Indeed, a constitutional amendment has just been adopted to relieve creditors so situated. We are even now paying for the sins of that system.

"As a means of remedying this con-

dition of affairs the Charter makers devised a plan whereby it is made the duty of the Supervisors in June of each year to make an estimate or budget, wherein a specified amount is designated and appropriated to pay each item of expenditure in the city government, in such detail as the Supervisors see fit, and when so fixed and designated, the respective sums are inviolably appropriated for the purposes of which they are set apart for the ensuing fiscal year. The various contractors who furnish these supplies have only to inquire as to the condition of this appropriation to be assured that they will be paid. Copies of contracts are filed with the Auditor, so he keeps a check on the fund. This system has worked well and it is reasonably certain that deficits will not occur in the future.

### COST OF MAINTAINING CITY GOVERNMENT

"It is true on May 15, 1898, in a public statement, as quoted by the *Chronicle* this morning, I said that we could under the Charter provide a city government to cost \$5,110,029, and we have done so and well done so. But let us understand the question. This is 'The dollar limit.' I added in the same public statement, which the *Chronicle* did not quote. 'The dollar limit only refers to the operating expenses of the city government. If public works are necessary and indebtedness is authorized therefore by a vote of the people, the interest and sinking funds, like the park appropriations, are outside the dollar limit.'

"Now the first levy under the Charter was made June, 1900, and bears out my statement made in 1898. The levy was as follows:

For operating empenses and maintenance of the City Government ("the dollar limit")	\$5,146,700
For Park, Interest and Sinking Fund on new issue of bonds for Hospital, Schools, sewers and Park Extension authorized by the people December, 1899, and now in the Supreme Court (all outside the "dollar limit")	446,285
Total	\$55,2985

"The operating expenses are charged with many items of an unusual character, some of which more properly belong to permanent improvements. For instance:

Examining available sources of water supply .....	\$30,000
Abstracts of property situated in Panhandle district, etc.....	10,000
For Trocadero Gulch.....	10,000
For new paving on accepted streets (not repairing), about.....	40,000

"Now, this levy was made on the basis of an assessment roll of \$375,000,000. The Assessor has, however, returned a roll of \$405,000,000, which gives us a surplus this year of about \$230,000; but the City Attorney has advised that it can not be used until the next fiscal year, beginning July 1, 1901. With a growing assessment roll, however, it will appear that our revenue steadily increase, and what ever surplus we have after paying operating expenses, that is in excess, for instance, of \$5,110,000 can be by the budget made applicable to permanent improvements.

"Expert Williams reports concerning the expenditures for salaries, as follows:

DEPARTMENTS.	First year under the Charter appropriations, 1900-1901	Last year of Consolidation Act Appropriations Expended 18, 8-1899.
Total.....	\$2,153,936	\$2,184,130
Board of Public Works—		
Salaries, General office, Bridges, and Corporation Yard.	57,780	57,726
City Hall Janitors and Employes....	29,820	39,780
Hall of Justice.....	7,530	.....
Gas Inspector.....	1,800	1,800
	<hr/> \$2,250,866	<hr/> \$2,283,436

"The saving under the Charter (after adding \$100,000 for Paid Fire Department salaries), \$32,570. Furthermore, the engineering department of the Board of Public Works will, it is expected, pay its own expenses from fees, which formerly went to the City Sur-

vveyor, who received about \$15,000 a year from this source. The foregoing new salary schedule, it must also be remembered, provides salaries of the Civil Service and other commissions, a fully paid fire department representing \$100,000, the maintainance of the new Hall of Justice, six additional Supervisors and the members of the Board of Public Works.

"All other expenditures from the general fund are controlled and minimized by the Charter system of competition in buying supplies of every kind whatever. Nothing can be bought by the city unless by competition, and the result, as already demonstrated, is a considerable saving. There are but the two channels of expenditure, salaries and supplies, and both of them are restricted far more than in the past.

#### STREETS.

"The Charter re-enacts in the main the provisions of the Vrooman Act as to street work, with some important exceptions. For instance, proceedings leading up to the assessment of private property to pay for such work can be initiated by the Supervisors only upon recommendation of the Board of Public Works. The owners of a majority of the frontage upon the proposed work may, as under the Vrooman Act, protest and stop work for six months. If at the end of that time a further protest shall not be filed by the owners of at least two-thirds of the frontage, the work shall proceed. In addition to posting, notice of the passage of the resolution of intention must be mailed to owners affected, where known. The rights of property owners are thus fully safe-guarded while at the same time silurianism is not encouraged.

#### PUBLIC BUILDINGS.

"The construction, maintenance and repair of all municipal buildings, including school houses and engine houses, is committed to the Board of Public Works. Formerly, each de-



partment did its own work, but it has been demonstrated that all building work is done better and more economically when directed by one department.

#### IMPROVEMENTS AND PARKS.

"The Supervisors have kept within the dollar limit, providing for the operating expenses and maintenance of the City government, but with a dollar tax rate, it goes without saying that the public cannot have all the desired permanent improvements in the first year. Improvements will come gradually out of each year's saving. This year, for instance, we saved \$40,000 for paying accepted streets and \$50,000 for extraordinary expenses, looking to permanent improvements as water supply, Panhandle abstracts and Trocadero Gulch which opens the south side to a fuller development.

"The Park extension, hospital and school house construction, and the beginning of the intercepting sewer awaits on the decision of the Supreme Court, where the bond case will be heard on January 14th, the delay in the consummation of which all progressive citizens deplore.

"The Tax levy included Interest and Sinking Funds for these improvement bonds for the six months beginning January 1st, for we confidently believed that we would be able to issue them at that time, adding beauty to the City, strength to her institutions and at the same time giving employment to labor. With the most beautiful park in the world, we have, unfortunately, no proper entrance or access from the City proper, and the plan to bring the panhandle down to Market Street, connecting the City with the ocean beach appeals to the pride of every loyal San Franciscan, and by connecting the Park with the presidio, we annex, as it were, 1,500 acres of Government land, making a park system unparalleled in the world. By boulevardizing Dolores Street and acquiring two blocks for a park in the Mission connecting therewith, we bring that part of the City into the system.

"In my message to the Supervisors last year, I said that Fort Mason, otherwise known as Black Point, should be made, with the consent of the Government, a park for that end of the city, and added, 'that this beautiful promontory, the termination of Van Ness Avenue, would be also brought into our park and boulevard system,' and it is devoutly to be hoped that this extensive and consistent plan will be speedily realized.

"The general law in force at the time the Charter took effect, regulating the powers and duties of Park Commissioners in cities, fixed the maximum levy for park purposes at six cents. The Charter fixes it at not less than five nor more than seven cents. Formerly only Golden Gate Park proper was under the jurisdiction of the Park Commissioners. The Charter has put under their control all parks and squares, including grounds about public buildings, and the result has been that all of our small parks and squares, which were formerly looked after by appointees of the Supervisors, are being greatly improved and beautified.

#### POLICE.

"Under the old law, the Police Commission was practically compelled to give licenses to all saloon annually. The Charter leaves it discretionary with the Board of Police Commissioners to issue licenses quarterly so that the Commission can exercise a wholesome control. If there are too many saloons in one neighborhood, or if they are conducted in a disorderly manner, the Commission can refuse a license. There are now 3,055 licensed saloons in this city. Under this power, the Police Commission has enforced the six-foot ordinance, has regulated the side entrance, has driven dives out of import thoroughfares, and generally has compelled decency and minimized crime. Twenty-seven men were appointed to the force on merit, having passed the Civil Service Examination, which is both physical and mental.

## FIRE DEPARTMENT.

"The Fire Department has been taken by the new Commission out of politics, following the letter and spirit of the Charter. It has since the first of the year, as required by that instrument, been put on a fully-paid basis, so that now we have a metropolitan service superior to any in the country.

## ELECTION COMMISSION.

"The Election Commission has conducted the Presidential election without any adverse criticism, fairly and honorably, and at a cost twenty-five per cent less than in any other year.

## BOARD OF EDUCATION.

"The Board of Education has adopted a course of study on lines of the best educational thought. It has introduced mechanical training for boys and cooking for girls, which has received general commendation, especially from the masses of the people, who look for some practical results of common school education.

"The School Fund, less than given any recent Board, has been wisely administered, expenses reduced and old debts paid.

"The schools have been conducted without scandal. Formerly the elected Board of Education sold appointments just as contractors purchased contracts, both in the Board of Education and Supervisors, and then they would have to pay again to keep their positions or to have their bills liquidated. There has been no suspicion of dishonesty in any of the departments.

## BOARD OF HEALTH.

"The Board of Health has improved the hospital service and has saved the city from infection by prompt measures at a critical time at an expense to their funds of about \$6,000 and to the merchants of about \$10,000. Chinatown has been cleansed from cellar to roof. Honolulu paid three millions and Syd-

ney, Australia, fully as much for their recent experience with Oriental infection.

## BOARD OF PUBLIC WORKS.

"The Board of Public Works is the engineer, the builders, the carpenters, the street makers and the cleaners of the city. It has done its work with intelligence and skill. Parties of engineers have been investigating sources of water supply as required by the Charter, and their report which will soon be made, will show the real value of the Spring Valley Water Works and the cost of an independent supply. The Board has paved streets, especially south of Market Street, where they were most needed, and reconstructed the Spear Street Wharf—an urgent necessity—and have let a contract for paving Grant Avenue from Market Street to Bush Street, and for the building of bunkers from which street sweepings will be transported to the park for fertilizing.

"In the month of November, 1899, under the old system, the Street Department cost for salaries of deputies, bookkeepers, clerks, foremen, bridge tenders and such class of employees, \$5,864. The same work was done in November, 1900, for \$3,343, which shows a substantial saving.

"Formerly, the janitor service in public buildings, especially in the City Hall, was scandalous. Now, the City Hall is kept perfectly clean; and furthermore, the walls have been kalsomined and a modern passenger elevator constructed in the center of the building, which will obviate the necessity of operating the two old ones.

## NO FRICTION.

"I desire to say for myself that the Commissioners, thirty-three in number, have all acted in harmony with the Mayor. There has been little friction, considering that a radical departure has been made and a new scheme of government inaugurated. So the system by



which appointments are made is satisfactory in the first year's trial.

"The Charter fixes the number of clerks in most departments, but for flexibility's sake leaves it to the Mayor to recommend the employment of extra clerks, with the concurrent approval of fourteen Supervisors, and these, so authorized, have to be taken from the eligible list of the Civil Service, so no question of patronage enters the transaction, so safe-guarded is it.

"The City Attorney has interpreted for the several Boards and officers the meaning of the Charter from time to time with great clearness and satisfaction. Suits have been brought by interested parties to overcome the Charter provisions affecting the powers of the Board of Fire Commissioners and the powers of the Civil Service Commission, and, no doubt, more litigation will follow until all disputed questions are settled.

#### THE INITIATIVE.

"The unique provision of the Charter, the initiative, was tried during the year. It was, however, expected that that when invoked it would be to checkmate a corrupt or vicious legislative body. But on the contrary, the Supervisors refused to legalize by ordinance the selling of pools in the downtown district and the poolsellers proposed an ordinance to the people by petition at the November election, which was voted on at large and defeated by about 3,000 majority, justifying the good sense of the voters, and this probably settles the question forever.

"In giving the new organic law a fair trial the other officers of the city government have co-operated, with occasional dissent, however, when the new order pressed heavily on ancient abuses which had almost become, by usage, the common law of the City Hall. Public sentiment has been behind the new Charter at all times, and the noise made by its detractors has been out of all pro-

portion to their numbers and influence.

"Without the support of enlightened public sentiment, not always, I regret to say, voiced by the San Francisco press, no form of government and no public official can accomplish satisfactory results, but I have, amidst the roar of factitious opposition, always believed that the citizens of San Francisco would compel full justice be done the new law and strengthen the hands of those who were chosen to inaugurate and defend it, and I have not been disappointed, on the whole, it can now safely be said, that the new charter has justified in every essential particular the expectation of its friends, even to the creation of enemies."

#### Other Freeholder's Charters.

The Chairman: We will now listen to what the representatives having freeholders' charters have to say with reference to the working of the charters in their cities. The first city on the list is Berkeley.

Mr. Staats, of Berkley: The Charter of Berkeley is certainly working very well. Thirty per cent of our money is each year devoted to the public schools. During the last year we have expended \$100,000 raised by bonding in the erection of new school buildings, a fact of which we are very proud. Another advantageous proposition, as I think, is that each ward chooses its own representative to the municipal council or Board of Trustees. I believe that a man elected from the ward is usually one known by his neighbors, a man with whom they come in daily contact, and with whom they are naturally well acquainted, so that they can know whether he is a good representative for them. And as there has been no clique, in the Board of Supervisions in San Francisco we too, can say that since the adoption of the freeholders' charter in Berkeley 1895, there has never been a clique in the Board. The charter pro-

vides for the appointment of the Superintendent of Streets by the legislative body. We believe that that is a good thing. Since 1895 we have increased from 18 to 55 miles of macadamized streets, and although our revenue for that purpose has not increased to any extent, the streets are kept in condition for practically the same amount. I think I may say generally that you will find no better kept streets in any city in the State than ours. Our salary list is small. It is probably less than any other town of its size in the State. You have here with you our Town Clerk, Mr. Hascom, and he is to talk to you upon the subject of "Hints to Clerks." We can speak of him in the highest terms. There is no doubt, in fact, that Berkeley has in every way been benefited. Our tax limit is 75c, and yet we are able to conduct our government in a very creditable manner.

The Chairman: The next city is Los Angeles. We understand that they are having a new charter here, so I presume goes without saying that they are dissatisfied with their present one. As Los Angeles is not at this moment represented, we will hear from Napa.

Mr. York: I do not know of any distinctive feature in our charter that calls for discussion. The charter was adopted in 1893 and has been in operation ever since, and has worked very satisfactorily. Like all charters, it was found to be not quite adequate as originally adopted, and there will be amendments made, I presume, since we have prepared some for submission, if they pass the Council. We elect our Council by wards, and all of our officers are elected with the exception of the City Attorney.

The Chairman: We will hear from Sacramento next.

Mr. Devine: There are some features of our charter that are very imperfect, but still, it is comparatively new, and the citizens, it seems, are satisfied with it so far.

The Chairman: What has San Jose to say?

Mr. Miner: There is just one feature about the San Jose charter that I wish to call attention to that does not exist in any charter that I know of, and that is what we call the Cash Basis problem. We have provided for setting aside five cents of our dollar limit every year, to be used for no purpose whatever only to accumulate, until it has arrived at a sum large enough to defray the expenses of the city government from July 1st to December 1st, the hiatus between the fiscal year and the time provided for the raising of the tax. Then we carry that amount as a surplus forever, and always have cash of hand to do our business with.

The Chairman. Stockton is not represented at this moment, and unless some city has been omitted, that includes all of the cities with freeholder charters except Oakland. Would any one like to ask any questions.

Mr. Hutchinson: I would like to ask Mayor Phelan if any street work has been done under the provisions of the new charter?

Mayor Phelan: Street improvements have been advertised, but I do not think one of the actual work has been reached.

Mr. Hutchinson: I simply wanted to know the experience in San Francisco.

Mr. Phelan: Heretofore a great deal of street work has been stopped by protest, but I do not know that we have had that experience this year.

Mr. Melick: I call attention to the fact that in Pasadena we have just adopted a new charter, subject to approval by the Legislature. We think it may be regarded as an advanced charter, and that its workings in the future may be watched with some interest. The co-operation of the League is invited. In fact, that is one of the main reasons why Pasadena came in as a member of the League.

The Chairman: The charter of the City of Oakland was adopted in



1888. It has no civil service provision, but we wish it had. The charter framers endeavored to cover that ground in a line and a half, "Competent and experienced employes in the several departments shall not be unnecessarily removed," and you can imagine how it worked. We have home rule, as we all have to a certain extent under freeholders' charters, except in street matters, in which we chose to adopt the Vrooman Act. We have a peculiar situation in the fact that the District Attorney of the county appoints a deputy who is the prosecutor of all violations of city ordinances, and who had a room in the City Hall, drawing his salary from the city government. Some of us think, as was said here yesterday, that that is hardly fair. We have a Board of Police and Fire Commissioners who attend to the appointment of policemen and firemen, and our Superintendent of Streets is appointed by our Board of Public Works. In the matter of street lighting, we let annual contracts. They are let by the Council, however, and not by the Board. Our last contract called for the expenditure of about \$70,000 for the lighting of streets alone. Requests for supplies are signed by the Mayor and Chairman of the Finance Committee, though that is a provision made by an ordinance under the charter. We have something the same difficulty that Mayor Phelan has spoken of with respect to discrepancy between the assessment roll estimate and the amount on which the tax is finally levied, though I think not any such discrepancy as he has specified. The situation in San Jose, as stated by Mr. Miner, is a very much better one than the indecision that exists for so many months as to the payment of bills, and that is the cash basis proposition. Our Board of Education is elected, but after that the work is done under the general law. The boards are not appointed by the Mayor in the City of Oakland, but are elected by the people, with the exception of the Health Board.

Mr. Phelan: I have been wondering what objection there would be to fixing the State rate of taxation the last Monday in June, as our city rate is now fixed, by amendment to the law. Then all the charters could be amended to conform to that, and the fiscal year begin to run on July 1st without any difficulty.

Mr. Miner: We are holding a special election in San Jose to make the city law conform to the State law.

Mr. Phelan: Making the fiscal year begin December 1st for our city?

Mr. Miner: Yes.

Mr. Phelan: You will stand alone in that respect.

The Chairman: I think the charter of the City of Oakland is silent in the matter of fixing the fiscal year, and if that is so, I am under the impression that there is a State law that will enable the City of Oakland to change its fiscal year, but no one has dared to do it. There would then be a short or a long year, and somebody would get hurt.

Mr. Phelan: I think San Jose's idea of accumulating suggests a way out of that.



### Municipal Collieries

Owing to the unprecedented increase in the price of coal, the city of Glasgow has decided to consider the advisability of establishing a municipal colliery. The Corporation, for the purpose of its various departments, is a large purchaser of coal, and in the current year has contracted for over 700,000 tons. Twelve months ago the Corporation was in a position to buy at the rate of 16s 2d. per ton, but owing to the recent panic in the coal market the Corporation is called upon to pay 4s 9d. per ton more than paid for the last five years. Altogether the coal bill of the Corporation will this year amount to \$571,666. It is proposed to buy a coal mine and operate it by the Corporation. The city of Manchester has taken similar action.—*City Government.*

## Library Department

"It is the function of the public library to preserve, organize and disseminate knowledge. The library supplements and forms the center of all other forms of educational activity and expands the system of free public education to cover the entire span of life.

### A Golden Opportunity.

A golden opportunity will present itself to the legislature of California in the consideration of a new General Library Law, for which a draft has been made by the attorneys of the League of California Municipalities.

Correspondence with eastern library authorities, careful reviews of all modern library legislation, painstaking efforts to realize the needs of our State, and legal skill have all been freely exercised to produce a modern library bill. This measure may well be called Twentieth Century bill, for its provisions reflect the sentiment and voice the demand of this new period of time.

California has outgrown the existing library statute which simply permits the establishment of public libraries; that has served its day and should now be placed by one which would provide for the wants, yes, the necessities of our people.

This bill recognizes the fact that the public library should be the constant aid and the complement of the public schools; that the boys who so largely leave school before the age of twelve should have a chance to continue their education through life, in fact that general cultivation is the birthright of every boy and girl in this age of the world; that intelligent citizenship, broad view of life, technical skill, and high morality greatly depend upon the liberal support given to this free institution. No better investment of dollars and cents can be made by any commun-

ity whether poor or rich—no improvement in our legislation is more imperatively needed.

California has always prized her common school system; no State has been more liberal; the best is always sought in the elementary, the High School and the State University.

This is in marked contrast to the treatment accorded to the free library. No legal aid has ever been given to the free libraries by the State, except to simply sanction their establishment and their maintenance. It is high time that this wide-spread indifference to their welfare should cease. In place of apathy should come an intelligent appreciation of their value; in lieu of a permissive statute should exist a law, which, like our efficient district school library law (one of the best in the United States) should be compulsory in its terms (in the free library act when 25 per cent of the voters of a city so petition) and which, like the said school law, should provide a minimum annual support.

Another broad-minded provision of this bill authorizes boards of library trustees to contract with other boards in their county for loans of books on reasonable compensation. This will allow the use of traveling libraries to be sent out from any public library to residents in the same county. Systems of traveling libraries like those extensively used in the east, whose centers are frequently in the State Library, are not easily and economically applied to a State of the immense area of California. Traveling library work, to be successful here, must provide for closer contact and resulting personal knowledge of conditions and needs. Other important changes for the better administration of libraries are also provided for in this measure.

The fundamental feature of the bill is the recognition of the educational value of the free library by authorizing its establishment on petition of 25 per cent of the electors, and providing a minimum rate of maintenance; the max-



imum rate being wisely left to the option of each locality.

The passage of this Bill will remove the status of California from its present position, now far behind the States of New England, New York, Ohio, Michigan, Illinois, Wisconsin and Minnesota to foremost rank among those States which are fast coming to realize that the public library is just as important to a community as a public school.



#### Relations of Free Public Libraries to Public Schools.

Most town and city libraries are supported, like the free schools, by the public money, drawn from the tax-payers, and supposed to be expended for the common benefit of all the people. It results that one leading object of the library should be to acquire such a collection of books as will be in the highest degree useful to all. The education gained at school must, with the majority of the people, be meagre at the best. This may be, and should be supplemented by extensive reading after the school life is finished. If this work is to be done well, the pupil, must, while in school, not only be trained to like good literature, but also, if possible, to use a public library intelligently. This demands cordial relations between librarians and teachers. The public library should be regarded as an important and necessary part of the system of public education. Librarians usually know books much better than teachers do, but children not nearly so well; therefore, active corporation is necessary to the accomplishment of the best results.

The teachers of a town should know the public library, what it contains and what use the pupils can make of it. The library should furnish a good collection of books in all the principal departments of study, thus supplementing and broadening the work of the teacher. In our own library, much attention is given to the preparation of special reading lists on topics under consideration

in the schoolroom, such as the observance of special days, current events, etc., the good results being shown in the very liberal patronage of the library by the teachers and pupils. The system of free access to the library shelves, is also of great advantage to students. Special privileges are granted to teachers who desire books for home and school use. Principals of schools are allowed ten books for thirty days, and each primary and grammar teacher is entitled to three books for the same length of time, in addition to two books issued on a personal card. Sets of pictures, and reference books, are loaned for special occasions.

By the recent addition of a childrens' room to the library, it is hoped that much good will result. This room contains about 1700 carefully selected volumes, including sets of the best juvenile periodicals. Children eight years of age are entitled to a library card, and an average of 1400 volumes per month are circulated for home use. Every effort is being made to encourage the use of the library by the young people. Exhibitions of pictures, of notable men and women, of notable buildings, of birds, animals, etc., accompanied by book lists, are attractively arranged in this room. If we cannot have originals in art, we can have excellent reproductions from the Perry pictures, and other equally inexpensive ones, the library's province being not only to instill good literature into the child's mind, but to do something for that other great faculty love of beauty, and give it something worthy to feed upon. In our library, even the youngest tots have been provided for. A corner of the childrens' room is artistically decorated with Mother Goose posters, and the low tables are supplied with nursery books and pictures for library use. For the benefit of parents, who often visit this corner with the children, there has been posted a "List of books and magazines, and magazine articles relating to child study and the kindergarten, in-

cluding a few stories and simple narratives which can be re-told to children.

N. M. Russ,

Librarian Pasadena Public Library.



#### Library Consolidation.

The Mechanic's Institute at San Francisco has commenced a movement of far-reaching importance in library matters. There are at present in San Francisco, in addition to the Free Public Library supported by the city, a number of libraries supported by private corporations. It is the object of the Mechanic's Institute to combine these into one great library.

The Mechanic's Institute has about 100,000 volumes, the Mercantile Library 75,000, the French Library 25,000, and eight or ten professional and scientific societies enough to make a grand total of perhaps 250,000 volumes.

Such a consolidation would be a great benefit as well as a credit to the city of San Francisco.

It is out of the range of possibilities that the Free Library can at the same time provide all the general literature required by the public of a modern city, and all the technical books of which professional men of every class can make use.

In time these two distinct needs will be even more pronounced than at present and it is to this object of "building for the future" that the present efforts of the Mechanic's Institute are being directed.



#### Library Progress in California.

The year just closed is notable for the marked improvement in library interest and development which has taken place in California. This results in part from the liberal gifts for library purposes from individual donors, and also from a gradually increasing public estimate of library work as shown by larger local appropriations.

It needs no prophetic eye to see that California enters upon the New Century with bright prospects for educational

progress through her libraries. Says President Jordan in one of his papers, "Te Californian loves his state because his state loves him, and he returns her love with a fierce affection that men of other regions are slow to understand.

This warmth of affection has been shown time and again by gifts for public purposes. To mention but a few even of these liberal ones would show the names of Sharon, Crocker, Sweeney and Spreckles as givers to Golden Gate Park in San Francisco and Hollenbeck and Griffiths as donors of park lands in Los Angeles; of Cogswell, Lick, and Wilmerding as founders of industrial schools; of Lick as a creator of an Academy of Science and an observatory, and not least of all, of Reese, Searles, Miss Flood, Mrs. Sather, the Stanfords, and Mrs. Hearst as benefactors of higher education.

And this is but the beginning of a long roll of those princely souls who, with deep seated desires for the good of their fellow citizens and the advancement of their native or adopted state, will continue to broaden its rich life and enlarge its working power.

In the library field during 1900, we may note as first in order of time the opening of the stately, new library building of Stanford University, its donor being Thomas Welton Stanford, brother of Senator Stanford. Next to be spoken of is the tasteful Beale Memorial Library of Bakersfield, given by Truxton Beale of Washington D. C., the lot and building costing \$7000.00. In swift succession follow the offer of Mayor Phelan for a building for one of the branch libraries of San Francisco, the proposal of San Jose to erect a library structure worthy of that charming city, the recent gift of Mr. John Q. Packard of \$70,000.00 for a library building for Marysville. Mrs. Jane K. Sathers' present of \$10,000.00 to the State University Library (besides her other ones of large size for specified purposes) is of recent occurrence; the Carnegie donations to San Diego and Oakland are being realized in the new



buildings now being erected in those cities; the enlargement of the Pasadena library building at a cost of \$9,000.00 and the late bequest of \$4,000.00 by the will of John Robinson of Napa for the school library of Napa and the sums of \$500 for each of two other school districts are all evidences of a strong fresh interest in the subject.

And now in the very height of the festal season, like a veritable Christmas present as it is, comes a general consciousness that a consolidation of the smaller libraries of San Francisco with the Mechanic's Institute will not long be delayed.



## What the Cities are Doing.

Napa is considering the purchase of a steam fire engine.

Sonoma is having plans made for a neat city hall to be erected on the plaza.

Long Beach has adopted a preliminary ordinance for a bond issue of nearly \$50,000 for sewers, improvements to wharves, pavilion and bath house and for a steam fire engine.

Mayor Martin of San Jose advocates legislation to close "side entrances."

In boring for a water supply at Alum Rock Park, San Jose, a quantity of gas has been found. It is proposed to prospect further in hopes that a large supply will be developed.

Chico citizens want a sewer system.

Riversides new power plant is now running and the streets are consequently being again illuminated.

Riverside has a "no-spitting" ordinance.

Williams, Belser & Co., have been awarded the contract for constructing Pleasanton's new water system, the price being \$17,075. The system is a model one for its size and the new works will be appropriated by the people.

Hanford sold 31,500, 6 per cent sewer bonds on Jan. 14, to Duke M. Farson, Chicago, for \$35,100.

Santa Barbara's High School bonds to the amount of \$60,000 sold for a premium of \$7,140.

The Oakland Electric Co., has offered to furnish electric current after midnight to the City of Alameda and the Board of Trustees is considering the same.

Santa Rosa has won its condemnation suit against the Fountain Water Co., and has acquired the Peter Spring as an auxiliary to its municipal water supply. The value fixed by the jury was \$4,000. Before commencing the suit the city had offered a larger sum for the property.

Sacramento has purchased a new chemical engine.



## New League Members.

During the past month the cities of Woodland, Santa Monica and Anaheim have joined the League of California's Municipalities. Several other places are considering the advisability of doing likewise.

## A. L. FISH,

41 First Sts,  
San Francisco, Cal.,

— Contractors for —

**Water Works, Irrigating, Steam and  
Electric Power Plants, Complete.**

Worthington Steam Pumps and Condensers.  
Roots' Rotary Power Pumps.  
Buckeye Automatic Cut-Off Engines.  
Amoskeag Fire Eng. Co's Steam Fire Engines.  
Steam Boilers.

# The Tracy Engineering Co.,

151 Fremont St., San Francisco.

Needberg Corliss Engines.  
Allaire Automatic Expansion Gear Engine.  
Sauerbrey High Speed Vertical Marine type Engine.  
Pruessner Duplex Steam Pumps.  
The Tracy Automatic Damper Regulators.

The Tracy Steam Traps.  
The Tracy Cooling Tower and Condensing System.  
Wainwright Feed Water Heaters, closed type.  
Brownell Feed Water Heaters, open type.

Contracts taken for Complete Pumping and Lighting Plants. Plans and specifications and estimates furnished.

# CALIFORNIA MUNICIPALITIES

VOL. 5.

AUGUST, 1901.

NO. 1.



ONE OF RIVERSIDE'S SHADY AVENUES.

SAN FRANCISCO OFFICE . . . . .

ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.



## West Shore OIL COMPANY,

Producers of fuel oil,  
Kern River Dist., Bakersfield.

Will install oil burning plants for  
Municipalities and guarantee

### 50 Per Cent Saving

over Coal or Wood or make no  
charge.

MAIN OFFICE:

39-40 CHRONICLE B'LD'G.  
San Francisco.

## Special Blank Books

Made to order for

### Public Officials, Private Citizens.

If you want books of special  
design, ruling, etc., we will  
make them and give you the  
benefit of our experience in  
doing such work.

**A. CARLISLE & CO.,**

417 Montgomery St., San Francisco.

## PUBLIC RECORDS

Should be indexed by means of  
the

### Card Index System

**Simple  
Convenient  
Necessary**

For Public Officers, Libraries,  
Abstractors, Real Estate Agents,  
Insurance, Engineers, Physicians  
Dentists, Druggists, Loan Ass'ns.



Y. & E. Card Index System.

### Are Your Records Secure? Are Your Records in Order?

They are not unless they are filed in our

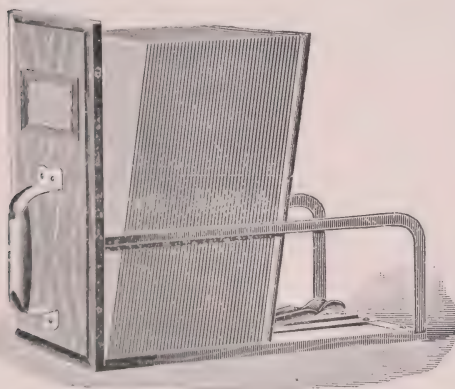
## Lang Document File

Made in Metal and Wood.

Send for Catalogue.

**Yawman & Erbe Mfg. Co.,**

29 New Montgomery St.,  
SAN FRANCISCO.



Lang Document File.

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 5. August, 1901. No. 1

## California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.

Office of Publication, - SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

### CONTENTS.

#### EDITORIAL:

Notes .....	3
Licenses and the Dollar Limit—The Primary Law.....	4
Art and Streets.....	5
The Streets of Our Cities.....	6
Sewage and Sewage Disposal.....	7
Uniformity in Municipal Accounting.....	13
Suggestions as to Parks.....	14
Public Health and Plaything of Politics.....	15
No Politics in Pasadena—Fresno Moving to Acquire Public Utilities.....	16
Oiled Roads.....	17
War of Extermination Against the Mosquito.....	18
More Forms of Street Work.....	19
Merced's Sewer System—Charter Amendments for Sacramento—Macadamizing Not Paving.....	20
Tar-Concrete Foot Walks—Could Not Be Councilman and a Christian—City Punged into Darkness by June Bugs—Has Never Had a Saloon.....	21

#### LIBRARY DEPARTMENT.

Increasing in Popularity—Traveling Libraries—Try Again—Advertise the Library.....	22
Stockton's Free Public Library.....	23
The Traveling Library Plan—A Magazine Clearing House.....	25
What the Cities Are Doing.....	26
Profits of Water and Light Works—Lime Water for Street Sprinkling.....	27

Additional topics for discussion at the next convention have been suggested as follows: "Experience in Regard to Municipal Ownership," "More Information Concerning Oiled Streets," "Progress in Sewage Disposal in California." As the convention meets in Los Angeles and as many Southern California cities have adopted Prohibition as a settled policy it might not be a bad idea to consider the Prohibition question in respect to its practical workings. All of these topics are timely.



Not long ago a gentleman called at the office of this league in search of certain information. The gentleman, Dr. Horsman, is a resident of Germany and is a graduate of the University of Heidelberg. He has chosen the municipal service as his life profession and is visiting the leading cities of the world in order to familiarize himself with all the varied phases of municipal life, and thus more thoroughly qualify him to discharge his official duties in connection with the management of the affairs of the municipalities of his native country. Next year he expects to be placed in some subordinate position connected with the administration of some small city. In course of time he expects to become an assistant Burgomaster of a



small city; later a Burgomaster of a large city. This is the way that efficient public servants are educated, provided for and retained in the service of the public in Germany.

We do things differently in this country. We elect a mayor who can't tell asphalt from a manhole, keep him in office two years and just as he is beginning to have a knowledge of things we fire him because he has made so many mistakes that we can't tolerate him any longer. Then we elect another man just like him.



**Licenses and the Dollar Limit.** The business men of Oakland are now getting a new conception of the "dollar limit" rate of taxation that is contained in the city charter. The assessment roll has been decreasing for several years past and the revenues of the city are inadequate to meet expenses. The result is that the city council has been forced to provide revenue by reviving the ancient practice of imposing licenses. A late ordinance imposes a license tax upon all signs displayed on business houses and a loud protest has gone forth from all of the business and professional men of the city.

The same state of affairs prevails at Los Angeles and a general merchandise license tax is threatened and the business organizations have held meetings to protest against the scheme.

A more unjust tax than a license tax can scarcely be imposed. It is a survival of the ancient practice of tyrants when they needed money, of exacting tribute from those whom were suspected of being prosperous and forcing it from them by threats of torture. Yet the same business men insist—generally—upon having a "dollar limit" clause in the city charter, and after all are not deserving of much sympathy. The im-

posing of a license tax now and then will serve to open their eyes to the necessity of adopting a rational system of taxation. If they will investigate the subject they will find that there are other means of raising revenue than by placing burdens upon legitimate industry. The business men are the ones usually responsible for the "dollar limit" fad. It is about time that they were getting tired of it.



**The Primary Law.** The new primary law has had its first trial, having been used to select delegates to the municipal nominating conventions in San Francisco. Those sanguine individuals who imagined that the adoption of a primary law would in itself create a desire on the part of the mass of electors to go to the poles and vote for delegates have been bitterly disappointed. Less than one-third of the voters of the city attended the primaries. Something more potent than a primary law is necessary to awaken the mass of the citizen to a sense of their political duties.

Those who had hoped that the effect of a primary law would be to overthrow bossism have seen their hopes crushed. The bosses understand the situation better than do the reformers, for it was they who enacted the law. They had nothing to fear from the present law. As an instrument of reform a primary law is useless and it is so understood by all who have a study of political conditions. In many eastern states where primary laws have been tried and found wanting, the movement is in the direction of abolishing political conventions and making nominations direct. Very likely this scheme will also prove a failure. To achieve permanent practical results of a reform nature each citizen must be made to feel a personal interest

in the governmental scheme. This can be only done by the government engaging to do something, to perform some service, for each individual.



**Art and Streets.** It is not an infrequent sight to see a beautiful front yard artistically laid out and kept in perfect order marred by a growth of weeds along the edge of the sidewalk and the street itself presenting an unkept appearance. How the owners of such property find pleasure in such an inartistic contrast surpasses understanding. It would enhance the beauty of their own property if they would carry out their scheme of gardening to the curb line and devote a little time in an effort to keep the street in presentable appearance. It would have a marked effect on the beauty of a city if property owners generally would endeavor to show a little less selfish regard and have a little thought for the public welfare. While the streets are for the use of the public, yet contiguous owners should have a certain degree of property interests in the streets fronting their premises. A well kept street bordered with lawns, flowers and shrubbery enhances the value of the land fronting thereon and its artistic appearance adds greatly to the owner's fund of pleasure. It would be well if public officials could devise some plan that would encourage property owners to improve the sidewalk area, and the wider this sidewalk area could be made the more inducement would the property owners have to beautify it. It would not be a bad idea if municipalities should offer a series of prizes to those who displayed the most artistic judgment in the beautifying of the streets. In this work property-owners might find the services of a municipal Art Commission to be a material aid to them by proffering sug-

gestions as the proper method of laying out this scheme of improvement.

Many Eastern and European cities have these Municipal Art Commissions, a part of whose duties is to direct the beautifying of the city's thoroughfares.

No city is too small to have such a commission; neither is it an expense. Such commissioners are usually glad to serve without compensation, and the presence of such a commission will, without doubt, encourage the artistic spirit of the community.

The appointment of such a commission is an experiment worth trying in every California city and town. Without climatic conditions we ought to have the most artistic streets in the world. And it is high time that we developing in this artistic direction.



Another use has been found for crude oil, viz: in the extermination of mosquitoes. Have stagnant water covered with crude petroleum and the work is done. With oil at two cents a gallon, there ought to be mighty few of these pests in the State.



Los Angeles is laying the foundation for the proper management of the water works by providing for a system of civil service in connection therewith. A practical civil service would seek to retain the present force of employes as far as possible; because they have the experience that new men will not have.



A reputable newspaper in this State is authority for the statement that a single water company spent \$75,000 in order to secure control of the municipal government of a certain city. The officers of the same company are probably of the opinion that the ownership of the water system by the municipality wouldn't do at all, at all, because the additional patronage it would bring would corrupt the people.



## THE STREETS OF OUR CITIES.

BY GEO. HANSEN, Landscape Architect, Berkeley.

### SIDEWALK PARKING.

The selection of sidewalk trees has been bespoken before. It remains to consider the ornamentation of the ground into which they are planted. Some property holders, fully aware of the difficulty of keeping these narrow strips properly in order, merely gravel the space along the curb line. This is a neat and serviceable way provided the ground is laid in decomposed rock as before described.

The sowing of grass is a costly undertaking. It calls for much watering partly on account of the narrowness of the area, partly on account of the excessive heat brought about through the concrete. The establishing of the turf is also of considerable outlay. In this place more than any other the weeds will gain a hold in spite of all care, and as soon as the trees assume large dimensions the grass becomes thin and presents an unpleasant appearance. The mowing is slow and the trimming of the edge another outlay of time. The evaporation is great till the boughs of the trees offer some protection, and retain the moisture.

An attempt has been made every now and then to substitute something which will prove equally acceptable yet of less care and expense than turf. It should be stated as a fundamental truth that any grass recommended in place of rye grass is to be looked at with suspicion. Blue grass is too tender in California and every other grass proves a disappointment. If the trees have grown large and absorb all the good of the soil even those mixtures recommended for seeding under trees will prove of little value.

The clovers are the best we could find for sidewalk parking. We undertake such improvement to get the green

effect. We want to deny the existence of city conditions where we erect our homes, and we want to get such results at the least outlay. The white clover forms part of all grass-mixtures and proves green even at those times when every grass shades toward the yellow. All clovers (leguminous plants) are good, not excluding the red top or the alfalfa. The white clover will serve in every place where the blue grass would be selected for its trim and neat appearance, as for instance before a white-painted residence, built on classic lines. Red top clover or alfalfa will serve in front of a shingled structure and blend well with the rural effect of the outer appearance of such home. It should prove an easy matter to find some one in the community who will look after the cutting of such clover lawns for the amount of feed which they will furnish for his cow.

Whatever growth of other nature we endeavor to establish we must keep in mind that the green color is the main factor to be sought. Further a certain amount of resistance must be in the plants which we set out, for whatever we grow we must be conscious that the sidewalk is for use and that the public can lay claim to it at every opportunity they so choose. Therefore such soft growth as Nasturtiums and ivy geraniums may be planted only where interference is out of question. Verbenas come next. Violets will answer only under exceptional conditions as they turn wretchedly during a great part of the summer months. Periwinkle, small myrtle, Hypericum, Gazania, and especially the creeping rose (*Rosa Wichuriana*) answer well for low bordering. The so called English Ivy serves under almost any condition even in the bright sun provided that a sufficient amount of

irrigation is applied.

The planting of vary-colored foliage, such as geraniums set out in rows of different kinds is one of those vulgar effects into which unrefined taste will fall at times.

A further and very important reason for growing plants along the outside strip between curb and pathway is the influence it has in diminishing the effect of the glaring macadam of the driveway as seen from the homes. We can manage to reduce the effect of such to a minimum through wise selection of low shrubbery to grow along the gutter. They also serve to draw the full area of the sidewalk into the private holding in

so far as they serve as a hedge toward the street. Any low growing bush which endures pruning fairly well serves in such places. The shrubs should not be too attractive in the way of flowering nor too soft in the formation of wood, and, if possible, of an evergreen nature. Some flowering perennials can be grown underneath to advantage and thus form a harmonious whole. I mention as one combination the planting of brier roses and the setting out underneath of violets and daffodils. Other good suitable low shrubs are Mahonias, Euonymus, Privet and Berberis Thunbergii.

[*To be continued.*]



## SEWAGE AND SEWAGE DISPOSAL.

BY SOLON C. SMITH, JACKSON, OHIO.

Sewage has now risen well nigh to the dignity of a science, certainly to a worthy place among the various branches of modern engineering. Storm water sewers and the so-called sanitary sewers were always a mismated pair and can seldom be domiciled together, except, perhaps, in the case of the very largest cities. A sewer that is large enough to accomodate the rush of a summer freshet is so large that in the interval of no rain that follows only a mere thread of slop-water meanders along its broad invert. Solid particles, unless fully immersed in water, become stranded. These solid articles undergo slow decomposition, the kind of decomposition that produces sewer gas. The amount of water necessary to flush so large a sewer daily is unreasonable and cannot be supplied by a self operating flush tank. Sanitary sewers are now made small that the daily flow will keep them half full or more. They flow best when 93% full, but the air space in the crown above the liquid would then be too small for thorough ventilation. It is interesting to note that a twelve-

inch line, for instance, with a fall of only one foot in 200, and running only half full, and for only sixteen hours of the twenty-four, will accommodate 8500 people, even though every one of them supply seventy gallons of sewage per day.

Sanitary sewers are sometimes very advantageously accompanied with a drain tile to remove ground water, but from the sewer proper ground water and storm water are rigorously excluded by well cemented joints.

Stoppages seldom occur in the trunk line, even though the grades be very flat, but unless flush tanks are provided they are frequently in the higher levels, where, though the grades may be steeper, the flow is small and intermittent. A twelve-inch sewer running full (which will give just the same velocity) is fairly safe with a fall of one in 400, or even more if carefully laid. The laterals, which should not be less than six-inch nor more than eight-inch, will work one in 200 or even 250 if flush tanks are used. But the house connections, which are always four inches, must have one



in 50, and then be allowed to drop in almost at the crown of the lateral. Lower grades are not absolutely prohibited. There is said to be a sewer in Kalamazoo, Mich., more than a mile long, which has a fall of only one in 1200 and has given no trouble in its life of sixteen years. We even read in the New York State Board of Health reports of a four-inch sewer 2,800 feet long with a total fall of only three inches, which has done service for nine years without interruption. It is said to be provided with a flush tank, and we fancy it must work under a slight head during the flushing.

Flush tanks keep the laterals rinsed out clean and in a sanitary condition. Fresh sewage is not offensive. Every dead end of every lateral should be provided with a flush tank. These should work automatically and discharge of their own accord about once in twenty-four hours. There are many makes but the Miller Patent has the distinction of having no valves, small pipes or moving parts. A six-inch siphon is guaranteed to discharge 300 gallons in 40 seconds and an eight-inch siphon 500 gallons in 30 seconds. Their effectiveness depends on their ability to fill the lateral chock full for a little time. They are supplied with a tiny trickling stream of water from a cock so gauged that in the required time the level in the tank will rise to the going off point.

Man-holes are so placed that there is one at every change of grade and every change of alignment. A lamp-hole can occasionally take the place of a man-hole. Obstructions can then be located, and, if not due to breakage, can generally be removed by making connection with the waterworks and turning on just sufficient pressure.

My home town lies sloping in two directions, on the two sides of a tongue of land, and we have our choice of running the trunk line around the point of this tongue and back on the other side, or of siphoning the sewage from one side across the saddle of the ridge to the

other side. A pump must be used to lift the sewage into the disposal works. Some one has invented a pump that will take care of itself. A float on the surface of the rising liquid connects an electric current which operates an air compressor, which, in turn, forces the accumulated sewage out of the air tight receptacle.

It was formerly thought best to trap off the sewer completely with all connection with the open air, but our best engineers now advocate not only flushing, but ventilation. The house is trapped off, of course, but a large ventilating pipe is run up through the house and given free vent to the open air above the roof. If perforated covers are then placed upon the man-holes at the surface of the ground the short and tall columns of air all over the city, coupled with their unequal heating, give ample ventilation to the laterals and house connections.

The early settler threw his slops on the ground and the ground purified them. By and bye the villagers found this created a nuisance and they provided drains emptying into the creek. but as cities became populous and homesteads dotted the banks of every stream, only the very largest rivers could sufficiently dilute the filthy tide to render it innocuous. The question soon rose, what rights has a man that his neighbor is bound to respect? The farmer asked, Must my stock drink foul water? The sportsmen mourned the fish that were driven out, and City No. 2 said to City No. 1, higher up the river, keep your offal out of this water, I have to drink it. The State steps in and says when sewage shall be purified.

Various expedients were tried. Fire is the universal purifier and it was first tried, but it was too slow and expensive. A. C. Herman, sewer commissioner of St. Louis, says sewage is usually 99 8-10 % inorganic matter and 1-10 % organic. Straining was tried. The electrician and the chemist were consulted, the latter most successfully, and for years

chemical precipitation was the approved method. Settling tanks are provided where the sewage is received and treated with chemicals, the effluent is turned into the neighboring stream and the sludge is disposed of in some way. Chemicals are expensive. After all the most that has been accomplished is to put off the evil day, to postpone the time of putrefaction. The sludge is in the way and much organic matter escapes in the effluent. The inevitable must come, all this matter must decay somewhere and before long. All processes that depend upon antiseptics, or the arresting of decay, are flying in the face of nature and only prolong the agony.

Nature designed a system of sewage disposal before sanitary engineering was heard of. As the primitive elements of matter can only be locked up into organic forms under the influence of life, so only can these same first elements be unlocked from their places in the composition of organic things in the presence of, and under the influence of life. Bacteria furnish this life. No decomposition can ever take the place without bacteria, except perhaps that effected by fire and a very inconsiderable amount effected by certain chemicals. Kill all bacteria in a vessel of nutrient material and exclude all others, and it will keep indefinitely; as every housewife knows, in effect when she cans fruit. Bacteria are the important and almost the only agents of universal hygiene. To quote Pasteur, "If there are still living beings, if since the hundreds of centuries the world has been inhabited, life continues, it is to them that we owe it. Without them the surface of the earth would be covered with dead organic matter, the remains of plant and animal bodies, which, retaining the elements necessary for the building up of new plant and animal bodies, would soon cut off the food supply of new plants and animals. Life would be impossible because the work of death would be incomplete, because the re-

turn to the atmosphere and to the universal kingdom would be wholly suspended."

Bacteria then are nature's choice of the agencies for sewage disposal, and the sanitary engineers of the twentieth century are ready to follow suit. But nature needs assistance. We must cultivate these little plants. Partial decomposition is offensive, complete decomposition is not. The ultimate and final products of decomposition are such comparatively simple gases as carbonic acid gas, marsh gas, hydrogen and nitrogen, and these are neither offensive nor harmful, while some of the intermediate products of decomposition are noisome and dangerous. These are generally speaking, the more highly compound gases, and the results of incomplete decay.

The most ideal sewage disposal works would be the one that could most quickly and completely break up the highly complex organic compounds into the simple inorganic elements. The septic tank supplemented by intermittent filtration beds is the highest type we have yet reached. We build lofty chimneys to assist and quicken natural decay, tanks to avail ourselves of the work of the anaerobic bacteria and filter beds to multiply the numbers of the aerobic.

There has been so much twaddle about germs, and so much rot in the semi-scientific columns of newspapers about microbes, that the popular mind has not yet clarified as to the nature and offices of the widely different kinds of bacteria. The best preparation for the study of sewage disposal is a patient perusal of some good work on bacteria and their products written within the last two or three years. Any ingenious mechanic can take care of the mechanical features if he understands the objects and purposes.

The essentials are a septic tank or artificial rotting chamber large enough to contain one day's flow or a little more, about  $\frac{1}{2}$  cu. yd. per inhabitant,



shut off from the air, and filter beds of about three times that capacity where the effluent from the tank can be turned on and off at intervals. The contents of the septic tank should stand about six feet deep and the inlet should be well toward the bottom, so the sewage will not carry down much air with it, nor allow the gases to escape back into the sewer. The outlet should be a few inches below the surface so as not gather the scum from the surface nor the sediment from the bottom, and should be so constructed as to cause no strong currents. Perhaps the best form is a pipe extending across the tank at the proper height and split on the under side. The pipe should be given an upward turn for several inches just after emerging from the tank in order to keep the height of the liquid in the tank constant. Otherwise scum will enter the pipe, and otherwise a ring of half dried matter will accumulate around the walls where the level rises and falls. It is in this rising, if anywhere, that pathogenic germs will survive the actions of the tank. The shape of the tank is of no importance but care should be taken to so arrange the inlet and outlet that the sewage will not be carried directly from one to the other before settling. Sometimes the tanks are long and they are at opposite ends. Sometimes several partitions are built extending part way across from first one side and then the other.

Sometimes the tank is circular, with a pump well in the center where pumping to a higher level is necessary, in which case a tight partition is built from the outer circular wall to the inner and the openings are on opposite sides of this partition. A floor is unnecessary unless the circumstances are very peculiar. The dangers from the liquids percolating through the soil has been greatly exaggerated. The walls are of brick and cement. A cover is not quite so necessary as might be inferred from the statement that light and air must be excluded. A heavy scum forms in time

that excludes both very satisfactorily. But for many practical as well as sentimental reasons the tank should be covered. Accidents may befall children and employes. The contents may become too much chilled in winter season. Like the baker's bread, it must be kept warm or the yeast will not work. The yeasts and the bacteria of putrefaction are closely allied species. The cover is sometimes merely the brick walls brought together in an arch, sometimes sleepers and a plank deck, sometimes I-beams and corrugated steel covered with concrete. Sometimes any rough material with several inches of loam on top.

The filter beds should be from four to six feet in depth, though shallower ones often answer. If inclosed by a wall of brick laid in cement, well and good, but an earth embankment is sufficient, or drain tile, laid plentifully underneath from the proper outlet. If the amount of elevation will permit, a secondary filter to receive the effluent from the primary is often advisable, especially where a high degree of purity in the final effluent is important, as where a water works intake is no great distance down stream. Filter tanks have been in use much longer than septic tanks. They have been treated for using raw sewage, and for treating the clarified product from chemical precipitation plants. In such cases they require a greater area.

Akin to these is the broad irrigation system, or land treatment, where the raw sewage is run out onto the sewer farms, or run into a system of subsurface drains of porous tile, to be taken up by soil and growing crops. This system is best adapted to sandy soils. Berlin, Germany, has such a soil, and is the largest city that ever adopted the broad irrigation system. She has a sewer farm of 28,000 acres, costing ten million dollars. She uses only half of it, but this half is about five miles square, and as large as the city itself.

The ideal material for artificial filters is crushed charcoal, not only because of the air it carries in the usual voids, but because of its porosity and the load of air it carries in consequence. But charcoal is scarce and expensive. The next choice falls on crushed coke, being very similar to charcoal, and municipalities would do well to bear the expense, though heavy. Crushed cinders from which the ashes have been sifted or winnowed is a close second and very cheap. Furnace slag, called cinder with us, if crushed fine enough, would be acceptable. For it must be remembered that it is not the material that determines the utility of the beds, but the size and shape of the particles, or, rather the size and shape of the voids for carrying the air and sustaining capillary attraction. It does not operate by straining. Its action is purely biological. Crushed glass or porcelain would, however, be an inferior material because these micro-organisms do not adhere readily to such smooth surfaces. Burned clay or brick crushed, are useful and clean, coarse, sharp sand is excellent, especially for the secondary filter, which should always be finer than the primary. Gravel is good for the primary if sifted over a quarter-inch mesh. Coal slack might work, but I fancy it would choke, unless, perhaps, when from mines where the coal broke with a more or less conchoidal fracture.

Every town of any size without a sewer system is full of septic tanks under the old-fashioned name of cess-pool. What is new about them is our knowledge of the process that takes place in them. They differ also from the cesspool of our grandfathers in the outlet, inlet and cover and in the time the contents remain there, the scale upon which they are built and the fact that they are intended only as a prelude to a further process.

At this point recall distinctly the meaning of four words—saprophytic, parastic, aerobic and anaerobic. Per-

haps also facultative and pathogenic. Saprophytic bacteria have the power of obtaining the nutriment they require for their building up and for the carrying on of their vital functions from dead vegetable and animal tissues, and from dead tissues only. Parasitic bacteria are those which are able to flourish on or within the substance of living plants or animals. Some of these parasitic species are pathogenic, or disease producing, and some are not. There is a small class that is said to be facultative, because they can adopt either mode of life, and among them are some of our most dreadful foes. But with none of these kinds have we anything to do except the saprophytic. These may be aerobic or dependent upon the oxygen of the air for their support, or anaerobic flourishing best where air and light are excluded.

The anaerobic act first. They are the bacteria of putrefaction. They disintegrate the solid animal and vegetable matter in the tank, liquefy it and bring it into solution. The aerobic act upon these disintegrated and liquefied compounds in the filter beds and by a process of oxidation change them into harmless gases. One process is supplemental to the other. One group performs what the other can not. When the waste products of human life enter the tank they carry with them millions of bacteria, generally estimated at from ten to twenty millions to the cubic inch. Under such suitable environment as they find there their numbers quickly rise to six or eight or ten hundred millions to the cubic inch, as nearly as can be estimated. The complex nitrogenous substances are broken up and liquefied.

Substances like paper, starch and woody fiber, containing cellulose in various forms, are changed by a process of hydrolysis. As only the liquid and such substances as are soluble can escape from the tank, other portions remain until the process is complete. The action that takes place might be com-



pared to the process of combustion. If it had been burned in a furnace only the ash would have remained; all else would have been driven off as gas. The bacteria have taken the place of heat. All the solid matter that remains permanently is the ash. The remainder has not all escaped as gas, however. Much of it became soluble in water and went out in the effluent. This gas, containing marsh gas and hydrogen, will burn with a colorless flame if ignited at a small vent in the cover of the tank. When not ignited there is no disagreeable odor, as it is free from sulphuretted hydrogen.

The effluent from the tank is of a dark, chocolate color, containing not only matter in solution, but in suspension in a very fine state of sub-division. It is sometimes made to run over an apron in sinuous courses to aerate it before reaching the filter beds. There every particle of sand in the filter receives a thin coating of liquid, which is equivalent to spreading it over a thousand acres, and the voids between furnish air to every part and parcel of this area. Suppose the material in a bed six feet deep will hold in suspension, by capillary attraction, six inches of liquid and the voids still contain twenty inches of air, then we have the liquid in intimate contact with three times its bulk of air. During the period of rest, through the agency of the aerobic bacteria, oxidation takes place and harmless gases and harmless nitrates are the result. When the second dosage comes on this air and this liquid are forced down into the drains underneath. After a longer or shorter period of rest, generally from 12 to 18 hours, the dose is repeated.

Some lively and profitless discussion is now being engaged in to determine who first discovered septic tank action. Patents are multiplying and various inventors are endeavoring to get injunctions on Dame Nature to prevent septic action except in apparatus of their own contriving.

The capacity will vary with the kind

of material in the beds, the kind of sewage to be treated, whether the beds are divided into primary or secondary, and will be almost double in summer what it is in winter, and greater after they have been running a while than at first. Half a cubic yard in the septic tank, one cubic yard in the primary filter and one-half cubic yard in the secondary filter ought to be ample for each inhabitant. One acre in the primary filter ought to provide for from 10,000 to 12,000 people, and one acre in the secondary filter from 20,000 to 25,000. This system would not be adapted to a city like Chicago, but is admirably suited to the average county seat town. Manchester, England, a city of 600,000 inhabitants, finds it very satisfactory. It would not be satisfactory for a combined sewer system.

In theory the durability of the septic tank would be limited only by the accumulation of the ashy or purely mineral matter in the bottom, and would be prolonged indefinitely by occasional changing. In practice this is nearly so. If rightly managed cleansing once a year ought to be sufficient. Aside from the freshly deposited matter not more than a foot of indestructible matter will be found. The filter beds, receiving only products soluble in water, will last indefinitely. It is believed they will last longer than under the older processes without the septic tank, notwithstanding a larger quantity of sewage passes through them. In some of these processes they run two years without any indication of clogging or becoming foul, and when opened the sand has been found bright and clean. They are well-nigh automatic in their working, but what little attention they do need is of the intelligent kind where brains are at a premium. A correct diagnosis is everything in relieving their troubles.

The report of the Massachusetts State Board of Health says that the effluent from some of their biological filters is freer from contamination than the Mer-

rimac River at Lawrence, where it is pumped for domestic purposes. As a friend of mine remarked: "It tastes all right, but a mouthful quenches my thirst when I think where it comes from." Sims Woodhead of Edinburg, in his work on "Bacteria and Their Products," calls frequent attention to the inimical action one class of bacteria exerts upon another, resulting in the extinction of the one with the less favorable environment. Disease germs do not survive the disposal works. All forms have a tendency to disappear as soon as their work is accomplished and their nourishment fails. They disappear rapidly, as we descend below the surface of the ground. Microscopic and biological examination of the effluent from the beds reveals very few micro-organisms of any kind. Whether they disappear or remain clinging to the gravel of the filter I do not know. This degree of purity is better obtained where both primary and secondary beds are used, the secondary approaching in size the first. It presupposes, too, abundant warmth and the absence of manufacturing concerns using chemicals that act as disinfects hostile to these low forms of life.—Municipal Engineering.



### Uniformity in Municipal Accounting.

Progress toward definite formulation of recommendations by societies having influence is apparent. Whatever effect such societies may have promises, therefore, to begin within a reasonable time. The committees of societies meeting during the summer are moving slowly and the effort to get together is so far rather weak, but is constant. The next society to consider the question is the American Society of Municipal Improvements, which meets at Niagara Falls, October 1-4. The editor of this magazine is the chairman of the Committee having the subject in charge, and he asks for all the assistance and encouragement which those interested in the subject

can offer in the preparation of his report.

In addition to the reports of committees referred to, it may be well to state the nature of the practical attempts to procure uniformity which have been put in operation to an appreciable extent. They are very few in number and are entirely independent of each other, so that further consolidation is needed to bring about true uniformity.

The first and oldest is the form for summaries or water-works reports which was prepared some years ago by the New England Water-works Association, and is used by a few superintendents. It is a valuable guide as far as it goes, and should serve as the center for the finally adopted forms for such reports, if any such adoptions are made. It needs some extensions to cover some portions of the water-works field not now touched.

The second is the American Water-works Standard Bookkeeping System, which is an attempt on the commercial side to introduce uniformity in water-works accounts by making standard books upon a plan devised from a study of the best forms of bookkeeping in vogue in the smaller water-works offices. The making of the reports called for by the form first mentioned is easy if this system of books is in use. A number of works are already supplied with the books and their use is extending.

The third and latest is a blank book furnished at a low cost by the League of California Municipalities, ruled for convenient use to segregate department accounts in a municipality. The headings of the columns are left blank, those needed for each city being written in. Standard entries are suggested if desired. One book may be used for a city, each department using as many pages as it needs, or each department may have a separate book. The object is to give forms for the guidance of city officers in making their reports, so that the information given in them will have its full value. If standard forms are finally



recommended, similar books with the headings printed in may be furnished, which will be of still greater value than the blank form. These forms cover all the municipal activities, while the two first mentioned are restricted to parts of a single department.

Information concerning any other plans for reducing any class of municipal accounts to uniformity is requested, that the next report of the committee may be as complete a statement of the progress made as is possible.—Municipal Engineering.



### Suggestions as to Parks.

#### THE MUNICIPAL WORLD.

When a municipality is about to locate or establish a park, the various sites which may be offered for the purpose should be well considered, not only as to the eligibility of the ground itself, but as to its environment, present and prospective.

The site chosen should not be low, wet land; for it must be drained, and is expensive to make attractive. High, rolling land, rugged in places, traversed by a deep ravine or a hill-torrent, is far more desirable; or a tract of land which will embrace both characteristics can be made into a park which is first class in every respect. The ravine or torrent can be readily bridged, and a pond can be excavated on the low land, which will serve to drain the remaining portion of it. An unfailing source of water is very essential to the beauty of a park that this feature should not be lost sight of for a moment when the site or sites are under consideration.

When the land is finally selected, then determine the sort of park you will have; and when doing so, consider Charles Elliot's definition of a park. He says:—"Lands intended and appropriated for the recreation of the people, by means of their rural and natural scenery

and character." If this definition is continuously held in view, the park will always be for the people, and fully appreciated by the people.

It has been found by those who have had charge of public parks that no urban park is safe from spoliation by permitting the grounds to be used for purposes utterly foreign to the original design and intention, until a community is educated to the controlling idea of a park in all its essential features; that if we should maintain mental, moral and physical health in large cities, we must have a breathing-space which is not only attractive to the masses, but is also easily accessible.

To preserve and maintain a rural park of quiet, sylvan beauty, we must exclude town-like things, omit from them decorative gardening monuments and statuary; rigidly exclude all catch-penny devices, trivial amusements, and not afford opportunities that can be found at a county fair for spending money. Make it a place for recreation or rest; furnish good facilities for drinking-water, a reasonable number of seats, boats on the pond, if there be one, and place for rendering good music, and the public will supply all other needs which are necessary for their enjoyment. Even speed-roads are objectionable in a public park, because of the crowd they gather, not to enjoy the park, but to see the driving and bet upon the horses driven; the youth who frequent the parks are thus brought into contact with the manners and language of the race-track. The drivers of the horses may be prominent citizens, very true, but not public-spirited ones, or they would not sanction the use of a park drive for such a purpose. All that they care for is the driving and the opportunity to exhibit their thoroughbreds; they do not seek the park with the same intention or purpose that the business man does who takes an evening drive therein with his family, or the man who goes there with his wife and children for a pleasant stroll.

While it is better to keep all buildings out of a park that is possible, yet in parks of large area, fifty acres or more, it is quite necessary that there should be a pavillion or two, under which visitors may seek shelter when sudden rainfalls occur; and there should be one substantial building, of low-roof, cottage design, for the convenience of women and children. All other buildings are unnecessary.

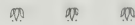
A park should always be perfected according to its natural features and conditions, not imitating an English park, with its grass and trees; nor should we give it that neat prettiness of the grounds about a villa. Be as original in the design of the park, so far as it relates to the landscape, as we are in the design of buildings and the improvements of our cities. Originality of design is what has made the noted parks of the world famous. Cultivate those trees and shrubbery which are indigenous to the land itself, adding such as grow well in that particular latitude. We should not attempt to create hills where they exist; and avoid the practice of leveling grounds. Use the spare earth to increase the height of undulations, and let the depressions exist. The moisture which they collect will give growth to certain kinds of trees and shrubbery which will not exist without it. John Ruskin said: "The simple uncombined landscape, if wrought out with due attention to ideal beauty of the features it includes, will always be most gratifying in its appeal to the heart."



### Public Health and Plaything of Politics.

The average American city needs nothing quite so much as a well administered department of public health. The merit system would bear fruit in no other department of the public service so promptly. But the dear people do not seem to have a fair conception of the necessities of the case, and are

just as well satisfied with mediocrity or sheer imbecility in sanitary affairs as they are with sanitary efficiency and integrity. The results of good sanitation are described by a general agreement that certain years were healthy ones anyway; the inevitable results of sanitary inefficiency are excused by the statement that the whole year has been unhealthy, or that the weather is unseasonable. The slipshod officer gets along without making enemies by efforts to enforce the laws, and is therefore decided to be a good fellow; the conscientious officer makes lawbreakers come to time, spend their money and improve the sanitary conditions, he is therefore a crank, an extremist, or worse. The political health officer only begins to realize the scope of his duties about the time his term of office ends; then when he might be of a little service the whirligig of fortune turns him out, and his successor assumes his duties and tries his apprentice hand upon a long suffering people. If this common condition in American cities is ever to be remedied the organized medical profession must take up the matter earnestly, and endeavor to secure the passage of laws, state or municipal, as the case may be, putting the public health service absolutely upon a merit basis.—Medical Advertiser.



### Report on Proposed New Water Supply for Sacramento.

In his report to the Citizens' Water Investigation Committee of Sacramento, Cal., Rudolph Herring of New York City says that there are only two courses to consider for a water supply for that city—the river water properly filtered and the East Side well supply. These two sources he considers carefully as to quantity, quality and cost. As to quantity he says the river supply is beyond question, but he believes the well supply would prove ample for the city's use. As to quality he holds that each,



under the methods suggested, would be equally free from bacteria and disease germs, while the river water is a little sweeter and softer, yet the well water is much softer than the water usually used for municipal purposes. He estimates that, in the matter of cost, after allowing for depreciation in plant, interest on investment, etc., the cost of operation of the river filtration plant would be, for 6,000,000 gallons per day, \$15,000 per annum in excess of the cost of delivery from the East Side wells, while for 10,000,000 gallons daily the difference would be about \$23,000.—Municipal Engineering.



## No Politics in Pasadena.

Mayor Weight is authority for the following certificate of political purity of Pasadena:

"I also have the honor to state that to my knowledge not an individual in the City's employ, or a department of the City, is in the slightest degree contaminated with, or dominated by, the disreputable and disgusting influences, known for the want of a more suitable name as, politics, in the relationship of one or the other to the City's affairs."



## FRESNO MOVING TO ACQUIRE PUBLIC UTILITIES.

FRESNO REPUBLICAN.

The public utilities committee of the Board of City Trustees, consisting of Messrs. Cowan, chairman, Boles and Myers, together with City Engineer Teilman, is at work on the proposition of acquiring city water and electric works. Two conferences have been held and the matter is getting in shape. The city charter makes it the duty of the board to procure within ninety days after the filing of a proper petition for public ownership of public utilities, plans and specifications of the probable actual cost of the construction and completion or purchase of said utilities. The preparation of these plans and estimates devolves upon the city engineer, although plans and estimates may be obtained from other sources also.

In reference to water works, the charter says: "In securing estimates of the cost of construction and completion of water works by the city, the Board of Trustees must procure and place on file, plans and estimates of the cost of obtaining from all of the several available sources a sufficient

and permanent supply of good, pure water for the city, in order that propositions for the acquisition, construction and completion thereof and incurring municipal indebtedness therefor may be submitted to the electors of the city."

It is proposed to figure on three available sources—the purchase of the present plant, the construction of a new plant, and the piping of water from the San Joaquin river. The last-named is, of course, the biggest undertaking, but its advocates say that in the long run it would be the best and cheapest for the city. It would be necessary to place a dam in the river twenty-two miles from here and pipe the water to the city. The water of the San Joaquin is said to be particularly good and pure. People who live along the banks of the river and have drunk the water for years never have malaria, it is claimed. City Engineer Teilman will figure on this undertaking so as to secure 80 pounds pressure to the square inch. That is the amount of force obtained

by the fire engines, so that if that system should be adopted, the engines could be dispensed with. All that would be necessary would be hose wagons, the hose being attached to the hydrants. It will be quite a job to ascertain the probable cost of the construction of such a system.

In order to have the water absolutely pure, two filtering plants would be put in at the dam.

The engineer must also prepare estimates of the cost of a new pumping plant, together with a complete system of pipes.

After the plans and estimates shall have been procured the City Trustees must, within sixty days, "formulate and submit to the electors of the city, at a special election, such proposition," says the charter, with characteristic ambiguity. Before so doing, however, the board must "colicit and consider" offers for the sale of existing plants.

Section 93 of the charter describes the next procedure, as follows: "Immediately after receiving and filing the said plans and estimates or offers to sell existing utilities, as hereinbefore set forth, the Board of Trustees shall, by ordinance, call a special election, at which shall be submitted to the electors the proposition of acquiring such public utility and of incurring a debt for the acquisition of the same, as set forth in said ordinance."



### More Concerning Oiled Roads.

Supervisor Theodore F. White of San Bernardino county, in a carefully prepared and lengthy article in the Redland Citrograph, gives the experience of that county in sprinkling oil on the streets, at first to lay the dust, and, as the result of experience, to form a solid roadbed. The following brief points are based on Mr. White's article:

In working for permanent results from 100 to 150 barrels of oil per mile are used on a roadbed eighteen feet wide:

Good results are obtained from the use of oil on soil that packs hard and loose alluvial soil, but there is uncertainty regarding its value on loose sands. Roads composed of clay or limestone should receive a light sprinkling of oil before oil is applied.

Oil on land carrying much alkali forms a soap, and washes off. Such roads should be covered with other soil.

Make roads in the fall, let them get thoroughly soaked, and apply oil in the spring before getting cut up. Wet roads must be drained. The surface of the ground must be dry when oil is applied.

Oil is applied while hot—from 200 degrees upward. It is well to heat the oil in tanks with the aid of steam pipes.

Ten or twelve miles is about as far as oil can be hauled in the sprinkling tank wagons for use before it cools off too much.

An ordinary lever harrow can be used on the streets before and after oiling to prepare the ground and mix in the oil. The teeth must be well slanted back.

It is well to have a repair outfit, consisting of a tank holding a few barrels of oil which can be heated at the roadside.

Not more than a quarter of the amount of oil used in the first application is necessary in succeeding years to keep the road in good condition.

Oils heavy in asphalt are the best for this use.

Above 5 per cent of water in oil makes it objectionable.

The cost of oiling roads varies with the cost of the oil, the distance it is hauled, etc.

As compared with the cost of sprinkling roads with water to lay dust, if the original application is charged to road construction, it is much cheaper as well as more effective.

A long period of wet weather with heavy traffic would lead to an oiled road becoming cut up and greatly damaged, but in this climate that is seldom



experienced.

Experience has shown that oil to a great extent prevents the disintegrating effect of storm water.

Oil used on macadamized roads to which a little sand has been applied has given good satisfaction.



## War of Extermination Against the Mosquito.

MUNICIPAL JOURNAL AND ENGINEER.

There is a widespread complaint against the mosquito, which includes nearly every city of prominence and many smaller ones, in the United States. All sorts of charges are laid at the door of the offending insect; that he is a nuisance, a spreader of disease, such as malaria, smallpox, typhoid and other fevers. Authorities have satisfactorily established all these claims, so that there is no reason why the war should not be pushed to the bitter end.

Petroleum has been the most universal remedy employed thus far. Its use has been spasmodic and limited to small areas, and there has been no systematic effort made in any one locality, accompanied by careful observations as to the results obtained. Dr. Alva H. Doty, Health Officer of the city of New York, has fitted out an expedition well equipped with specially devised apparatus for an extensive invasion of the enemy's country. Thoughtful plans for scientific observations upon which to base conclusions and evolve some efficient method which may prove universally successful have been matured.

The first onslaught against the pestiferous insect was made the other day under the leadership of Dr. Doty, who was accompanied by three sanitary policemen and five laborers. The oil tank wagon contained one hundred gallons of crude petroleum. Another wagon carried the party and the apparatus, including the spraying raft,

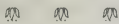
force pump, long lengths of garden hose and scythes.

Staten Island was the scene of the first operations. When a pond was reached the tank wagon was driven as close as possible to its banks, the raft was floated with the gridiron spraying apparatus suspended by chains beneath it. While one man worked at the pressure pump two others drew the raft to and fro over the surface by long ropes, until every part had been traversed. The oil, discharged in tiny streams some fifteen inches beneath the surface, quickly rose carrying myriads of minute wigglers, the mosquito larvae, to the surface and killing them, at the same time forming a light scum over the pond and preventing such larvae as escaped the oil from obtaining enough air to support life.

These operations have been repeated several days in succession, and the residents in the region where the experiments have been tried report that there has been a radical diminution in the swarms of mosquitoes with which they were previously troubled. Whereas, formerly it was impossible to sit out of doors at night in any place unprotected with mosquito netting without being fairly eaten up with them, now it is not at all unpleasant to sit in the open air at night for hours at a stretch.

Dr. Doty says that he is learning a lot about the habits of mosquitoes in these expeditions. One thing which has particularly attracted his attention is the fact that during the day myriads of the insects find refuge in the grass, weeds and underbrush adjacent to their breeding places. The mosquito is of a delicate organization, and it seeks refuge from the sun, high winds and storms, in this undergrowth. Without this refuge they would be destroyed or compelled to migrate. The doctor has consequently determined to cut away the undergrowth more thoroughly than at first proposed, and for that reason additional men will be employed.

The City of Vienna, Austria, is fortunate in possessing an immense system of local telephones, and what is more, the tariff, to say the least, is modest. In all there are close upon 20,000 telephones in Vienna, and for an annual payment of \$50, subscribers are not only connected with the extensive local system, but also with Berlin (450 miles), Lemberg (50), Dresden, Buda-Pest, and over 200 other towns in Austria-Hungary. Each of these places, many of them with only a few thousand inhabitants, has an excellent local telephone service. It is understood that a scheme is now being considered by the ministry of commerce by which every house in Vienna could be supplied with a telephone. Vienna is built on a flat system, and there are rarely fewer than 20 families living in one building. It is therefore proposed to establish a small "central" in each house.—American Telephone Journal.



### More Forms of Street Work.

It will be remembered that the town of Palo Alto is proceeding to do certain street work under the Local Improvement Act of 1901. This being the first proceeding undertaken under the new act the forms of the resolutions etc., have more than usual interest. In the May number the initial resolution was published and in the June number was given the engineer's report. Now follows the next resolution required and is as follows:

Whereas, The Board of Trustees of the town of Palo Alto, in the County of Santa Clara, State of California, did heretofore declare by resolution, that the public interest and convenience required that cement sidewalks and wooden curbing be constructed along and upon both the northwest and southeast sides of University avenue in the town of Palo Alto, County of Santa Clara, State of California, from the northeast curb line of Bryant street,

northeast to the southwest curb line of Hale street (except such portions of said University avenue as were already so improved); and

Whereas, The said proposed work was referred to C. E. Moore, City Engineer of said town, a civil engineer employed for that purpose, and the said engineer instructed to make a written report to the said Board of Trustees, containing his recommendations as to the best methods of doing said work and making said improvements; and

Whereas, The said engineer has filed the aforesaid report with the Clerk of the said town of Palo Alto and the said Board of Trustees have considered the same; now, therefore be it

Resolved, That the aforesaid report of the said engineer be and the same is hereby adopted as filed, and be it further

Resolved, That an assessment in the total sum of \$3518.95 be and the same is hereby levied and assessed upon and against the real property contained within the exterior boundaries of the hereinafter described districts, which said district is hereby declared to be benefited by the said proposed improvements, and is assessed to pay the costs and expenses thereof, to-wit:

(Here follows a description of the district.)

And the said assessment of \$3518.95 is hereby appointed among, and levied against each of the various subdivisions of real property contained within said district, as the same appear upon the map of said district, marked "Exhibit 5" and attached to the report of the said engineer, according to the benefit which each of said subdivisions will receive from said improvements, as the same appears in "Exhibit 6," attached to said engineer's report, and said assessment being levied at the rate of .55701 per front foot for cement walk and at the rate of .130226 per front foot for wooden curbing; be it further

Resolved, That the time allowed on deferred payments of the said assess-



ment shall be ten years, as follows, to-wit: Ten equal payments, the first of which shall be made at or before the time fixed by the Tax Collector of the Town of Palo Alto for the sale of the various parcels of land within the hereinbefore described district upon which the assessments have not been paid, and the others annually thereafter, one each year, at the time when the first installment of municipal taxes of the Town of Palo Alto shall be payable; that interest at the rate of seven per cent per annum shall be charged upon any and all deferred payments, which said bonds shall run for ten years and bear interest at the rate of seven per cent per annum; be it further

Resolved, That Saturday, the 21st day of September, A. D. 1901, at 8 o'clock p. m., at the regular meeting place of the Board of Trustees of the Town of Palo Alto in the Town of Palo Alto, be and the same is, hereby fixed as the day and hour when and where any and all persons may appear before the said Board of Trustees and show cause, if any they have, why the improvements provided for in this resolution should not be carried out in accordance herewith.

\*\*\*

### Merced's Sewer System.

Mayor Turner, of Merced, writes an interesting account of the trials and difficulties encountered in getting a sewer system for the town and stands ready to give some practical advice to other city officials who are likely to have similar troubles. The worst is now over and the new system is nearly half completed. The sewage is to be used for irrigation in connection with a 160-acre farm.

\*\*\*

\*\*\*

A special committee of the Board of Supervisors of San Francisco has been appointed to select a site for the new Carnegie library.

### Charter Amendments for Sacramento.

The Board of Trustees of Sacramento have agreed on amendments to the charter of the city and which will be submitted at the municipal election in November. The following changes are proposed:

1. The election of the Board of Trustees by the people at large.

2. Salary of Trustees to be \$600 a year.

3. Mayor's appointments to be absolute.

4. Reducing the number of school Directors to five.

5. Fixing School Directors' salary at \$250 a year.

6. Providing for an immigration fund by a tax levy not to exceed 5 cents on the \$100.

7. Providing for a fund for indigent and charitable purposes by tax levy.

8. Providing for an emergency fund, to be expended only by unanimous vote and consent of the Mayor, in case of inundation, damage or accident to any part of the city's levees; water works, water supply, sewers, water mains, fire alarms, fire apparatus, or for the preservation of the public records or property of the city.

9. Relating to the establishment of a Police Court.

\*\*\*

### Macadamizing Not Paving.

It has been decided in Maryland that, in order to use the streets when an ordinance has been passed to permit of such by a railway company, the said company must construct its tracts and commence running its cars within a specified time after permission is given. If, however, the streets are not "graded and paved" the time is extended. It was further held that macadamizing is not paving within the meaning of the ordinance.—Municipal Journal and Engineer.

### Tar-Concrete Foot Walk.

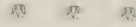
There have been many failures in the use of tar concrete walks, largely owing to careless workmanship and the use of inferior material. Where reasonable care has been exercised, and they have been laid by men who are experienced in this class of work, they have been very successful. In the city of Hamilton, where tar-macadam roadways are laid to a great extent, foot walks constructed on similar principles are being adopted.

These walks have been in use at Richmond Hill for fifteen years. Those at first laid were not a success, but after some experience better results were obtained. For the past twelve years nothing but tar concrete has been used, and the plank walks are being replaced with it as fast as they require renewal. In laying these walks a curk of  $1\frac{1}{2} \times 4$  inch pine is placed on each side of an excavation made to receive the walk. Between the curbs is then placed a gravel foundation, which is thoroughly consolidated and about three inches in thickness. Upon this foundation is then placed a two and a-half inch layer of the tar concrete. This tar concrete is simply a mixture of coal tar and clean, coarse, sharp sand, or fine gravel. The proportion of tar used will vary according to the quality of the sand, the finer the sand the more tar being required. An exact rule cannot be laid down, but about one measure of tar to eight or nine of sand will meet most conditions. Experienced men can lay this walk for forty cents, or even less, per square yard.

These walks do not present so good an appearance as cement concrete, nor are they so durable. They can be easily repaired where minor defects occur, and for use in villages and on the less important streets of towns and cities, if properly made, they will be found very much better and cheaper than plank.

The walks in Richmond Hill, which

have been down for twelve years, are still in good condition. They show little sign of wear, and have no appearance of decay, so that their actual life cannot be determined from their twelve years of wear.—The Municipal World.



### City Plunged Into Darkness by June Bugs.

The city of Zanesville, O., on the second evening in July was plunged into almost total darkness by a visitation of June bugs. They filled the air in countless numbers, actually smothering the electric lights with their burning bodies. The hotel offices were infested with such swarms that it was necessary to close the doors, notwithstanding the intense heat. In several instances church services were interfered with. The river bridges were almost impassable to pedestrians. The atmosphere about the lights was filled with clouds of live insects and floors were covered to a depth of several inches by dead ones.—Municipal Journal and Engineer.



### Has Never Had a Saloon.

The city of Hoopston, Ill., is an ideal temperance town, for it has never had a saloon. This has not interfered with its growth, for in 1890 it had a population of less than 2000 and today its inhabitants number 3833. The Mayor receives a salary of 50 cents a year; the remuneration of each of the Councilmen is one-half that amount and no fees are accepted. Hoopston has paved streets, electric lights, a system of water works, a well-organized fire department, and more and better sidewalks than any other city of her size in Illinois, and the boast of her citizens is that liquor does not contribute \$1 of license money to these improvements.



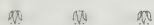
## Library Department

### Increasing In Popularity.

Most public libraries in the state make a practice of rendering annual reports on the first of July of each year. Many of these reports are published in the local newspapers and in this way reach the magazine editor.

The noticeable feature about these reports this year has been a great increase in the number of cards issued. It is not unusual to note that the membership of libraries in many cases equals twenty-five to thirty per cent of the entire population of the cities wherein they are located. Many cities report an increase of twenty-five, thirty, and even forty per cent or an increase in the number of cards issued. The circulation likewise shows a corresponding increase.

These facts are significant and denote that our public libraries are becoming more and more popular, and it is only a question of time before they will attain their proper rank as one of our most servicable educational institutions.



### Traveling Libraries—Try Again.

The first attempt to establish county traveling libraries in California, under the new state law has resulted in a failure, but this need not deter friends of the movement from persisting in the effort until the experiment has been fairly tried. There were special financial objections urged in connection with the scheme outlined in Los Angeles and these objections might not obtain in other counties. Librarian Jones is entitled to the credit of first outlining the scheme and it may be that her sugges-

tions will bear fruit elsewhere than in her home county. We published elsewhere a draft of the scheme and suggest its trial in some other county. We suggest that San Joaquin County be tried. The library spirit is strong at Stockton; there is but one public library in the county and there are numerous small towns that should have library advantages. Besides half a dozen railroads radiate from Stockton and service could be inaugurated at small cost.



### Advertise the Library.

It is a noticable circumstance that in places when the local newspapers give a considerable space so matters appertaining to the public library, that there is where the most successful institutions are to be found. We believe that the local press can do a great deal to popularize the library and any efforts put forward in this direction ought to have the support and encouragement of library officials. Most papers are perfectly willing to give a little space weekly to library news and every librarian could, with but little exertion, see that the local press had a half column of good library items every week. Arrangements might be made for a library column. This column should be headed with the name of the library; its location; hours when open; names of trustees and librarian; number of books; number of cards issued; and an invitation for the public to call.

The items of news should give the new books received, new cards issued giving the names of the new members. People like to see their names in print and then too, seeing that one's neighbor has become a library patron may stimulate others to join.

Then a list of the most popular books should be published monthly, and brief reviews of the latest books could be given space.

Advertising systematically done, will have a wonderful effect in increasing the popularity of the library. Try it

### Stockton's Free Public Libraay.

The beautiful marble structure located in the heart of the city of Stockton, Cal., can with truth, be said to be the pride of the city. It is said to be one of the most beautifdl of its kind, both without and within, in the West, and is held as a model of architecture at Buffalo.

Architecturally, Stockton's library is a very pleasing structure. The building is of Greek Ionic style of architecture and is a handsome structure of marble, brick and granite.

Library has had a rapid growth. At first, two small rooms were all that were necessary, but in four years it was removed into more commodious quarters in the Masonic Temple. There it remained until 1889 when a legacy of \$5000 was received from the estate of Frank Stewart, an old and prominent resident of the city. This with \$7000 that the city gave, was used for the erection of a brick building on the present site, which Captain Weber, the well known founder of the city, had given to the city in early days. It was in 1891 that the City of Stockton re-



PUBLIC LIBRARY, STOCKTON.

The building is chiefly due to contributions from private sources. Its erection was made possible through the public spirited generosity of Dr. William P. Hazelton, who devoted \$75,000 to the purposes of the Free Public Library.

Since its organization in 1880, the

ceived the bequest of \$75,000 from Dr. Hazelton, to be used in the erection of a building and in the purchase of books for a Free Public Library. The former structure was partially removed and the marble structure which people from far and near all admire, was erected on the site of the former building.



Dr. Hazelton was a pioneer resident of the city of Stockton, but, at the time of his death, was a resident of Tarrytown, N. Y.

Of the \$75,000 bequest from Mr. Hazelton, \$50,000 was put in the building, \$15,000 in books and \$3,500 was expended in a lawsuit to obtain the money. The balance \$6,500, was expended upon furniture and fixtures.

The building was furnished and thrown open to the public, March 15, 1895. Much credit is due to the Board of Trustees upon their management in bringing to a successful finish this beautiful structure. For this all honor is due James H. Budd, Frank H. Smith, Gus Gumpertz, Sewell Gower, J. M. Welsh, G. W. Tattersson and F. M. West, who had the responsibility of the bequest resting on them. John C. Pelton, the architect who designed the building, is recognized as a leading man in his profession.

All of the marble used in the construction of the building is from California, having been obtained from Inyo and Amador Counties.

The foundation of the building is granite, the walls being of white marble with huge marble columns 14 feet long supporting the front entrance. It is a two story building with basement.

The interior is particularly beautiful. On entering the main delivery room, which is oval in shape and very large and commodious, one is struck by the harmonious arrangement of rooms and the light softly reflected from the French plate windows on either side, which separate the reading rooms for the ladies and gentlemen respectively. The interior is furnished in oak and marble of a brownish color. The delivery desk faces the main entrance door, above and around which is the beautiful marble. There are gateways on either side of the delivery desk leading to the stack room, which consists of the ground floor and two galleries. To the right of the stack room is the reference department and to the left is the Librarian's office.

On either side of the main entrance are the stairways leading to the gallery where are two reading rooms and where files of the newspapers are kept. Leading from the gallery are two rooms; one, the Trustees room, another, the Art room, in which are stored a large collection of minerals. The Library contains 31,775 volumes of well selected books. Stockton has been extremely fortunate in having Trustees who have been good book men.

The Library is well patronized, 143,040 books having been loaned last year, according to the yearly report. The total number of cards in force are 3241.

Last year the Library was brought into closer touch with the schools by issuing of teacher's special cards, on which the teachers could draw five books for use in the schools.

To encourage better and more systematic reading among the pupils, a list of book suitable for supplementary work in the different grades was made.

Many clubs, literary and historical, derive much benefit from the Library. Their flourishing condition is due in a great measure to the number of miscellaneous books, historical, biographical and scientific, of which the library has such an excellent selection.

One of the special features of the Library during the past year has been the fitting up of a pleasant room, especially for the use of the children. Besides the juvenile books, there are placed on the shelves, the current numbers of such periodicals as St. Nicholas, Youth's Companion, Birds and All Nature and Little Folks.

The Library is at present in charge of the following trustee; F. M. West, President, F. H. Smith, Vice-president, F. D. Nicol, G. F. Buck and W. C. Ramsay. The present incumbent in the Library, W. F. Cloudsley, has been Librarian for the past fifteen years.

HATTIE M. MANN, Ass't Lib'n.

## The Traveling Library Plan.

The Trustees of the Los Angeles Public Library recently submitted to the Board of Supervisors a scheme to establish County traveling libraries in accordance with the terms of the new library law.

Following are the details of the plan:

First, traveling libraries—Groups of fifty volumes to be made up in permanent packages, which may be loaned for periods of three months:

(a) To communities having no libraries, upon the request of a certain number of taxpayers, who shall be responsible for the care and distribution of the books in the community.

(b) To libraries already established, from which the books shall be distributed throughout the community which the library serves.

(c) To Sunday-school libraries.

(d) To clubs and social organizations.

Second—The privilege of drawing books from the Los Angeles public library to be extended to all residents of the county without fee.

The expense of operating the first plan would consist of the original cost of the volumes which go to make up the traveling libraries and the clerk hire and supplies for operating the same. The sum of \$2500.00 per annum would be a fair appropriation to begin with, \$2000.00 to cover the cost of twenty-five libraries, with \$500 for expenses; the whole to be under the supervision of the librarian of the Los Angeles public library.

The second plan is less definite to estimate, but \$2500 would probably be the sum which would cover the additional wear upon the books already in the library and duplication of copies of books most called for which the added constituency would demand of the Los Angeles public library.

Carefully kept statistics would give a more accurate basis for estimating the exact cost for another year.

## A Magazine Clearing House.

### THE MUNICIPALITY.

The Wisconsin Free Library Commission has for the past two years maintained a "magazine clearing house" in its office in the capitol building in Madison. The purpose of this clearing house is to aid the free public libraries of the state which are making sets of periodicals for reference. Such libraries are asked to collect as many useful magazines as possible in their home towns and to send duplicates to the commission and also a statement of the numbers lacking to complete their sets. The commission then supplies the missing numbers if it can. In this way the commission has helped libraries to complete more than 2000 volumes during past eighteen months. As a complete index to the thirty-five leading magazines, from 1815 to January 1, 1900, may be purchased for \$12 sets of periodicals are exceedingly valuable for all students and members of study clubs and debating societies. In making exchanges the commission pays freight on receipts and charges freight on all it sends. No other charges are made by it. This work has proved so useful that the commission now proposes to establish a clearing house for state documents on the same plan. In order to get a nucleus the commission asks contributions of such documents from citizens.



San Jose will soon commence the erection of its Carnegie.

Los Angeles has been promised a library building but the name of the donor and the terms of the donation are shrouded in mystery.

It pays to have your books well bound. Our library bindings stand wear. Special attention given to re-binding. All the libraries patronize us. Hicks, Judd & Co. Main St., San Francisco.



## What the Cities are Doing.

Santa Paula talks of incorporating.

Pasadena has adopted a curfew ordinance.

Vallejo continues to put down new pavements.

Long Beach will try oil on the streets; also Riverside.

Santa Barbara has appropriated \$150 for band concerts.

Chico will sell its sewer bonds to the amount of \$40,000 in October.

Redland's bond election for water works occurs on September 10th.

Grass Valley finds it impossible to sprinkle streets owing to scarcity of funds.

Bakersfield's trustees have postponed action on the park project for the present.

Alameda will vote on issuing bonds for a high school building to cost \$100,000.

Lemoore is about to call an election to vote bonds for a water and lighting system.

Sacramento has a new chemical engine which is the pride of the department.

Pasadena officials will soon start the work of trimming all the shade trees in town.

Oakland merchants are contesting the validity of the recent sign license ordinance.

Hanford has sold additional bonds to the amount of \$10,000 wherewith to complete its sewer system.

Visalia has awarded the contrast for constructing its new sewer system to Truhitt & Martin for \$55,500.

Los Angeles will call no election on the question of issuing sewer bonds until the water question is settled.

Stockton has found Tesla gravel to be an excellent road material and a number of streets are being improved with it.

Rio Vista has called for estimates from Engineer Eager for a municipal water system and for a sewer system.

Woodland is about to enlarge its water supply by an additional well; also will install a centrifugal pump and electric motor.

Palo Alto's receipts for water sold last year amounted to \$7,600.80. The electric light plant returned a revenue of \$3,529.35.

San Bernardino Trustees have again taken up the matter of purchasing a water supply. At present the city contracts for a supply for its municipal system.

Woodland citizens have been agitating the matter of acquiring a public park. Considerable apathy, however, has been displayed and the project may be abandoned.

San Moteo has bonds for sale to the amount of \$27,000, the proceeds of which will be used to construct bridges and to purchase a corporation yard. They are four per cent bonds.

The plans for a sewer system for Vacaville have been adopted and an election will be held to authorize the issuance of bonds to the amount of \$30,000 for the construction of the same.

Stockton has made a contract with Isaac Springer whereby the latter agrees to sell the sewer bonds voted a year ago. The amount is \$50,000 and if sold a commission of \$1500 will be paid.

Red Bluff furnishes ice water to its citizens from its public street fountain and the local paper estimates that over 100,000 drinks will be taken therefrom this summer. Hard on the breweries.

Nome, Alaska, has established an up-to-date fire department. The mayor was recently in San Francisco and contracted for a fire alarm system, a chemical engine and a lot of other paraphernalia to be used for fire fighting.

San Jose has purchased a new No. 2 steam fire engine and a combined chemical engine and hose wagon. The total cost will be \$7,800 and by an arrangement made to lease the same the payments will be extended over a period of three years.

An election will be held at Los Angeles on August 28th to determine the question of using \$2,000,000 of bonds wherewith to purchase the property of the Los Angeles Water Company. If the election carries it will be a ratification of the compromise recently entered into by the city council and water company.

\*\*\*

## WANTED

By the town of Lincoln, Cal., a good second-hand Odorless Excavator, pump and tank wagons.

Address:—L. D. ADAMS, LINCOLN, CAL.,  
President Board of Trustees.

# Profits of Water and Light Works.

The report of C. H. Pond, City Clerk of Healdsburg, contains the following statement showing the net profits of the electric light and water system, all items of receipts, savings and expenditures considered:

Received from sales of light.	\$ 5,123 25
Received from sales of water.	4,066,95
Total cash received	\$ 9,190 20
Water for sprinkling Plaza	\$ 120 00
Water for 43 hydrants	516 00
Water supplied Luce	60 00
Water supplied City Hall	30 00
728,800 gals. sprinkling sts.	772 88
Lights for City Hall	269 40
Lights furnished Luce	20 04
Lights for streets, 31 acres.	2,604 00
Lights for streets, 32 c. p.	70 00
Total benefits derived	\$ 4,462 32
Total cash rec'd and benefits	\$13,652 52
Operating and repairs	\$4,650 97
Extensions and improvem'ts	5,037 09
	9,688 06
Net profit to the city	\$ 3,964 46
The amount of bonds issued was	\$80,000,
and the interest charged was	\$3,825.

# Lime Water for Street Sprinkling.

In an English medical journal a correspondent suggests that the use of lime water, prepared fresh, for watering the streets in hot weather would prove to be a practice productive of sanitary comfort. The advantages claimed for this practice are said to be those first of aggregating together loose particles of manure and thus to prevent them being diffused by the wind; second, of exercising a certain antiseptic action; third, of preserving wood paving; and fourth, of rendering wood less slippery. A contemporary thinks that the idea should be worth considering by the local authorities entrusted with the care of the streets, and that an energetic surveyor might make a trial of that plan on an experimental basis.

The question which arises is whether the small amount of lime carried by the water would have any appreciable effect. Many water supplies are already supplied with lime almost to the limit of saturation, and a few use softening processes, but no noticeable sanitary advantage has been reported from these towns.—Municipal Engineer.

## PACIFIC METAL WORKS

137-139 First Street, S. F.

4, 6, 8 Natoma Street, S. F.

WRITE FOR PRICES BATTERY ZINCS.

Solder For  
Linemen

Gravity-Crowfoot 6x8 and 5x7.

Fuller Zincs.

Amalgated Zinc for FIRE ALARM SYSTEMS.

Zinc Plates for Batteries.

LEAD—PIG LEAD.

BABBITT METAL

Calking Lead WATER AND GAS WORKS.

"ECLIPSE" BEST BABBITT METAL MADE.

The *FIRST* impression of a city or town is the lasting one.

The *FIRST* thing that one sees is the streets of a place.

The *FIRST* thing a city should secure is "good streets."

The *FIRST* pavement in the land is bitumen.

The *FIRST* bitumen comes from Santa Cruz.

The *FIRST* job rejected where it has been used is yet to be found.

The *FIRST* thing for you to do is to write them for information.

The *FIRST* contracting firm is the City Street Improvement Co.

And the *LAST* thing Perfect Satisfaction and Joy forever.

MILLS BUILDING, SAN FRANCISCO CAL.



# CEMENT

PORTLAND  
FOR CONCRETE WORK  
AND SIDEWALKS.

Josson, Haccourt  
and Federal.

Leading Brands.

W. R. Grace & Co.,

234 CALIFORNIA STREET.

San Francisco Cal.

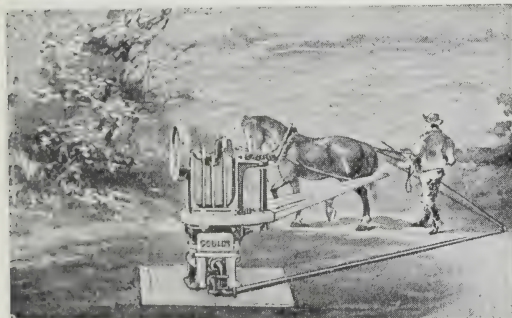
## FURNITURE

Court House &  
School Furniture

OUR SPECIALTY.

C. F. Weber & Co.

306 Post St., San Francisco.



GOULD'S TRIPPLE ACTING ROAD PUMP.

GEO. HANSEN.

## Landscape Architect

ADVISORY ARCHTTECT TO

PARK COMMISSIONS, MUNICIPALITIES

AND CEMETERY ASSOCIATIONS.

2705 Hearst Ave., - - - Berkely, Cal.

## A. L. FISH,

41 First Sts,  
San Francisco, Cal.,

— Contractors for —

Water Works, Irrigating, Steam and  
Electric Power Plants, Complete.

Worthington Steam Pumps and Condensers.  
Roots' Rotary Power Pumps.  
Buckeye Automatic Cut-Off Engines.  
Amoskeag Fire Eng. Co's Steam Fire Engines.  
Steam Boilers.

## Road Pumps—

## PUMPS

For Hand, Wind-mill, Irrigating, Spraying, Road, Ship, Wine, White-washing, Fire Purposes, Power Purposes. Air Purposes, Pumps for every conceivable use and for all depths of wells. Send for catalogue.

## WOODIN & LITTLE, Windmills, Tanks

312-314 Market St., San Francisco.

## Chas. C. Moore & Co.,

Engineers and Dealers

## Motive Power Machinery

OF THE HIGHEST GRADE

MODERN STEAM SPECIALTIES.

32 First St., San Francisco

THE  

## Babcock & Wilcox Co.

Stationary and Marine

Water Tube Boilers.

HOME OFFICE, NEW YORK.

CHAS. C. MOORE,

Manager Pacific Coast Branch.

# CALIFORNIA MUNICIPALITIES

VOL. 5.

JANUARY, 1902.

NO. 6.



CENTRAL PARK, LOS ANGELES.

SAN FRANCISCO OFFICE . . . . .  
ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.



TELEPHONE MAIN 771.

INCORPORATED JAN. 11, 1881.

N. CLARK and SONS,



WORKS AT ALAMEDA

MANUFACTURERS OF

Sewer Pipe, Chimney Pipe  
Caps & Tops, Architectural  
Terra Cotta, Hollow Tile Fire  
Proofing, Pressed Brick, Fire  
Brick, Tile, etc.

Office 17 & 19 Spear St.

San Francisco

TELEPHONE SOUTH, 90.

# STEIGER TERRA COTTA & POTTERY WORKS.

MANUFACTURERS OF  
HOLLOW TILE FIRE PROOFING  
SALT GLAZED SEWER PIPE, PRESSED BRICK.

ARCHITECTURAL TERRA COTTA.  
HOLLOW BRICK, PAVING BRICK, DRAIN TILE,  
CHIMNEY PIPE & TOPS, FLOWER POTS ETC.

FIRE BRICK

W E DENNISON  
PRESIDENT  
J. W. McDONALD, JR.  
SECRETARY  
L. A. STEIGER,  
MANAGER.

Office and Yard: 1556 To 1564 MARKET ST.  
and 127 To 131 CITY HALL AVENUE.

Works:  
SOUTH SAN FRANCISCO  
SAN MATEO CO.

SAN FRANCISCO, CAL.

J. P. K. OTIS,  
President & Manager.

EDW. P. KING,  
Treasurer & Supt.

UNION WATER METER CO.

WATER

Worcester, Mass.

METERS

Union Rotary Piston and Columbia Patterns

Pacific Coast Agent: - - G. FRANK OTIS, 349 Waldo Ave., Pasadena, Cal.

38 SPECIAL—32 WINCHESTER

Smith & Wesson's Latest  
The Military & Police Revolver

Perfect Workmanship — Accurate — Reliable —

Adopted by Police Forces—Recommended by U. S. Government  
Inspectors. Catalogue on application to

SMITH & WESSON, Springfield, Mass.

San Francisco Branch, 114 Second St.



# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 5.

January, 1902.

No. 6

## California Municipalities.

Published Monthly.

A. MASON, - - - - - Editor.

Office of Publication, - - - - - SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.



### CONTENTS.

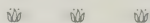
#### PROCEEDINGS OF THE FOURTH ANNUAL CONVENTION.

Convention Notes.....	163
List of Delegates.....	165
Address of Welcome.....	165
President's Address.....	166
Oil in Street Construction.....	169
General Discussion.....	174
Street Lighting by Meters.....	195
Two Constitutional Amendments.....	199
Concluding Exercises.....	203
What the Cities are Doing.....	204
Personals—Reports Received.....	205



An extra number of copies of this issue have been printed and the same may be obtained from the office of publication at 10 cents a copy.

### CONVENTION NOTES.



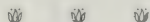
The Convention was voted the most successful one that has yet been held.



There was more enthusiastic interest manifested in the work of the Convention than ever before.



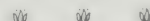
It was the consensus of opinion that crude oil will soon become an important material to be used in street construction.



The convention might have been termed an inquisition. Every speaker was considered as a witness and was subjected to a merciless examination by the delegates present. Consequently he had to understand his subject thoroughly. It was an excellent method of "trying out" a subject and the information thus brought out was extremely valuable.



The cities that for the sake of economy neglected to send delegates are apt to be financial losers.



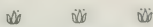
San Francisco would have had an active delegation present were it not for the fact that the city officers were



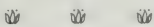
taking their seats for a new term on the day the Convention opened.



As a result of the "oiled roads" discussion two cities are already preparing to make extensive experiments with oil at an early day. San Jose proposes to gravel and oil one of its principal streets and Santa Barbara has given its engineer, Mr. Moyer, leave to experiment on a mile of suburban roadway.



It is very pleasing to note the enthusiastic reports rendered by the delegates, concerning the Convention and the League upon their return home. These reports were given to the city councils or the local newspapers, and without exception were full of praise of the League and the work accomplished at the meeting. The League is becoming to be regarded as one of the most important organizations in the State.



While a vote of thanks was given to Supervisor White for his masterly exposition of the subject of road oiling, the editor hardly believes the vote to be sufficient compensation for his time and trouble. Hence, against his protest, we have given him a free page advertisement of his road oiling apparatus. Don't think for a moment that he sought the opportunity merely to show his inventions. He is an enthusiast on good roads; that's why he gave the convention the benefit of his knowledge.



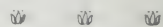
President Hutchinson made an ideal presiding officer. He was courteous in his demeanor and at the same time confined the delegates to the subjects under discussion.



Mayor Snyder exerted himself to the end that Los Angeles added to its reputation for hospitality.

## The Trip to Santa Monica

The account of the convention would not be complete without a recital of the trip to Santa Monica which took place on Saturday the day after the close of the convention. The trip was arranged by Mayor Snyder of Los Angeles and Mayor Jones of Santa Monica and their gracious invitation was accepted by about twenty delegates. The ride was over the electric road of the Los Angeles and Pacific Co. and was an enjoyable one in every respect. The scenic features were impressive, but what caught the eyes of the practical delegates was the inspection of the sewage disposal works at the Soldier's Home near Santa Monica. Here was seen the most successful septic tank in the state, and its operation was lucidly explained by the Superintendent, General Le Grange. The delegates obtained some valuable information on the subject. At Santa Monica the delegation was most cordially received by the city officials and several hours were spent in inspecting the city, its public works and varied attractions. The delegates obtained some pointers on sewer flushing and salt water sprinkling. Several members of the party enjoyed a dip in the surf. A substantial lunch was served and resolutions appreciative of Santa Monica and its officials were adopted. The trip was a most profitable and enjoyable one, the only regret being that so many of the delegates had to hurry back to their homes so that they were precluded from participating in its pleasures.



There is nearly three times as much matter to publish in connection with the proceedings as ever before and to do do this, it has been found necessary to distribute the reports in three numbers of the magazine.

—PROCEEDINGS OF THE—  
**Fourth Annual Convention**  
 —OF THE—  
**LEAGUE OF CALIFORNIA MUNICIPALITIES.**

The Fourth Annual convention of the League of California Municipalities was held at the Chamber of Commerce, Los Angeles, Jan. 8, 9 and 10, 1902. The following representatives of the members of the League enrolled during the session:

CORONA: Trustees, William Corkhill, W. G. McVicar.  
 ELSINOR: Trustee, C. S. Traphegan.  
 FOLLISTER: Trustee, E. E. Bolton.  
 LOS ANGELES: Mayor, M. P. Snyder; City Engineer, H. Stafford; Councilmen, W. M. Bowen and W. H. Pierce; Street Superintendent, H. J. McGuire; auditor, E. E. Unger.  
 MERCED: Trustee, W. H. Turner; Engineer, H. Henderson.  
 OAKLAND: Councilman, R. J. Boyer.  
 OCEANSIDE: Trustee, C. J. Gcetz.  
 ONTARIO: Trustee, C. G. H. Bennink.  
 PALO ALTO: Trustee, Jos. Hutchinson.  
 PASADENA: Mayor, M. H. Weight; Councilmen, C. C. Reynolds, F. E. Twombly, M. Slavins, W. Heiss, William Shibley; City Attorney, C. J. Willett; City Engineer, T. D. Allin.  
 PETALUMA: Trustees, M. Walsh, H. P. Brainard.  
 POMONA: Attorney, Robert G. Loucks; Trustees, Moses Petty, L. E. Grigsby, W. H. Poston.  
 RED BLUFF: Trustee, W. L. Bransford.  
 REDDING: Trustees, Carl R. Briggs, D. N. Honn.  
 REDLANDS: Trustees, A. E. Brock, William Fowler; Engineer, L. M. Lum; Street Superintendent, Geo. Iverson.  
 REDWOOD: Health Officer, W. O. Dodge.  
 RIVERSIDE: Trustees, B. Morse, W. L. Peters, C. L. McFarland, L. V. W. Brown, C. J. Covert; Clerk, C. R. Stibbins; Street Superintendent, Geo. T. Segar; Marshal, F. C. Wilson.  
 SAN JOSE: Councilmen, J. W. Macaulay, W. J. Rogers.  
 SANTA ANA: Trustees, Frank Ey, S. H. Finley; City Attorney, W. F. Heathman; Water Superintendent, R. Reed; Clerk, Ed. Tedford.  
 SANTA CLARA: H. A. Mason.  
 SANTA MONICA: Trustees, Robt. F. Jones, T. H. Dudley.  
 SACRAMENTO: Trustees, John C. Ing, Jas. H. Devine, E. J. Carragher.  
 SAN BERNARDINO: Trustee, J. J. Hanford.

SAN DIEGO: Mayor F. P. Frary.  
 SAN LEANDRO: Trustees, John F. Hopper, H. F. Eber.  
 SAN MATEO: Attorney, C. N. Kirkbride.  
 SAN PEDRO: Trustee, Dr. W. A. Weldon.  
 SANTA BARBARA: Engineer, J. L. Moyer.  
 SANTA CRUZ: Mayor, J. P. Parker; Councilman, Frank Roberts; Clerk, J. L. Wright.  
 SANTA ROSA: Councilman, J. W. Keegan.  
 STOCKTON: Mayor, Geo. E. Catts.  
 VALLEJO: Trustee, P. B. Lynch.  
 VACAVILLE: Trustee, F. B. McKevitt.  
 WATSONVILLE: Trustee, J. I. King.



The convention was called to order by President Hutchinson Wednesday, Jan. 8th, at 11 o'clock A. M. The President called upon Mayor M. P. Snyder, of Los Angeles, who delivered the following address of welcome:

*Mayor Snyder's Welcoming Address.*

Mr. President, and Gentlemen of the Convention: We have met together for the fourth annual convention of the League of California Municipalities, and for what will prove to be, I believe, the most important and interesting one in the history of the organization. Its influences will not be confined to this city alone, but will reach every other municipality within the confines of our great commonwealth. And I want to say to you, gentlemen, that Los Angeles is proud that you have seen fit to select it as a place in which to assemble in annual convention. Our city officials greet you, and all of our good citizens extend to you a hearty welcome. We trust that your stay among us will prove profitable in the way of gaining infor-



mation that will be of use to you when you return to your homes to again take up the work that you have laid aside for a few days in order to come here and attend to the work of this assembly. Not only that, but we trust that your stay will be a most enjoyable one in every way.

The League of California Municipalities has been in existence only a few years. Yet its benefits and the good arising from its influence and from these conventions, have proved to be of great value and of great assistance to the municipal officers of this State in the administration of their affairs. So far as the general interests of the people are concerned, it is my belief that this organization is the most valuable of any in the State. I have watched its course from its infancy, and have been and am very much pleased at the progress which it has made. I feel that in a very few years we will have an organization that will be much more powerful in influence than it is today. It is a good work, and it must go on. Experience has taught us that we cannot accomplish desirable results unless we are familiar with the subjects which we take up, the work that we are engaged in. This organization, as I understand it, is for the particular purpose of discussing the problems that we are confronted with in our municipalities, and the dissemination of knowledge, through conventions and otherwise. In convention we exchange our experiences in reference to the many vital questions that interest us all as municipal officers, and thus gain the information that we need—a source of supply that must of necessity be valuable to us at all times.

Within the next two or three years, doubtless a majority of us who are delegates here, will again be retired to private life. But that should not in the least discourage us. We have been entrusted by the people with a duty to perform, and we should perform it well, and push along the work as rapidly as we possibly can in the direction of better

and more advanced municipal government, so that when we step down and out, others will be in a position to carry the work on to a conclusion.

The work of this League is a noble one, and I say this because I believe that men can accomplish great good in no capacity better than in positions which we as municipal officers can do. I wish for each of you a continued success in your official duties, and bespeak for you the good that must come to all deserving and faithful public servants.

Again I welcome you to our city. The hand of good fellowship is extended to you by all of our citizens. Our sunshine and our flowers are yours, and the freedom of the city is granted to one and all. (Applause)

*Address by the President, Jos. Hutchinson,  
of Palo Alto.*

The President: Mayor Snyder, on behalf of the Convention, I thank you for the hearty welcome you have extended to us to Los Angeles. I heartily endorse what you have said in regard to the importance and the prospective power of this League. Perhaps indeed the term "prospective power" is open to some criticism, because this League is already a very powerful organization, as a review of the history of the League amply shows.

The League of California Municipalities was organized and exists for the purpose of interesting the various towns the State in matters of municipal improvement, to get representatives from all together and establish a kind of clearing house for the exchange of ideas. Along that line, we found it necessary to begin with to have a promoter and to have an organ to represent us, and scatter the information gained among the people at large, and to have as well a bureau of information and headquarters at San Francisco.

This League started with the small towns the State. At the last conven-

tion, we had with us from Sacramento a gentleman who comes from the glorious Emerald Isle, Mr. Devine, who often opposed the measures that came up, and placed himself on record against many an idea and measure. That is a most excellent idea, for a good strong opposition is necessary to produce the best results and the most carefully weighed results. Mr. Devine said that he thought the smaller towns represented in the League ought to watch the larger ones, and it was in accordance with that suggestion that one of the small towns of the State is represented in the presidential chair at the present time. The League, in fact, originated with one of our small towns, the town of Santa Clara. Mayor Druffel, of that town, issued the call for the organization of the League, though I believe the idea was that of our very efficient secretary, Mr. Mason. It was in December, 1898, that the first convention was held, with thirteen towns represented and twenty delegates. Mayor Phelan, of San Francisco, took hold of the matter at once, seeing the importance of it, and lent us every encouragement. There was a special session at Sacramento in January of 1899, but we were not then strong enough to have much influence with the Legislature. During that year, the Executive Committee of the League put upon the road a promoter, who visited the cities of the State, presented the purposes and prospects and business of the organization, as a result of which, in December, 1899, we had twenty-nine cities represented and forty or fifty delegates. Then the organ, "CALIFORNIA MUNICIPALITIES" was started, and Mr. Mason put upon a regular salary. The work went on, until in December of 1900 we had about forty towns regularly represented in the League, and one hundred delegates, and a very live and influential convention was held. A number of special committees had been working upon different classes of legislation that might be needed for the betterment of municipalities, and those

committees presented bills to the convention, which, after a free discussion and some modification as the result thereof, ten in number, were recommended for passage at Sacramento, and an instruction was given our representatives to go there and promote the passage of the bills by every proper means. Mr. Mason remained there during nearly one entire session, ably assisted by Senator Taylor of Alameda, who represented Alameda in the League, and by Mr. Melick, of Pasadena, and many of the other members of both Houses. Although we had been in existence then for only two years, the work and worth of the organization was recognized as a necessity. I went to Sacramento myself upon the new street bill, and my experience was that reported by Mr. Mason and the others, that the committees there seemed to exercise a strong presumption in favor of the League, or anything that the League presented. If the League was behind the bill, the bill was presumed to be all right. And of the ten bills presented by us, nine were adopted and are on the statute books today. And not only that, but other work was found there to do. Some of the cities outside of the League, like Woodland, needed something done, and the League got behind the bill and it went through. In Woodland's case, she saved \$1200 in salaries in one year—and immediately joined the League. The street improvement bill is no doubt open to some criticism; it has not yet been the law long enough to tell whether or not it is a good thing, but it has been used by some towns, and very little criticism has come to us. But when it is tried, whatever defects are found, we hope will be brought to the attention of the League, so that we may assist in their correction—for it is to remedy such matters and to generally assist in legislation affecting our municipalities beneficially, that is one of the chiefest of the objects of the organization. You can only have a real live growth in such a way.



Among the important measures put through by the League was the new bond bill. That has already been used by a number of towns, with marked success; their bonds have been sold much more readily and with a better premium, because the proceedings are so much more simple than under the old law, and so much less liable to question.

The bill forbidding counties to collect licenses within the corporate limits of the towns is another important measure passed through the influence of the League. It was an absurd proposition upon the face of it for the counties to collect licenses in the towns, since the towns looked out for the matter of policing, for the streets, and for all the immediate needs of the city. Yet the counties collected such licenses within such limits as without. The Supreme Court has sustained the law, and, just by way of illustration, Mr. Macaulay, one of the delegates from San Jose, tells me that his city increased its revenue for the year just past by reason of that act, some \$15,000.

As we meet in convention now, we find upon our roll 72 of the 110 municipal corporations of California, and we have nearly every one that has a population of over 1000, some of the smaller ones still remaining out, chiefly because of a lack of funds, but they take advantage of the information which the League can furnish, and which is cheerfully given them, ultimately expecting to come in. We represent cities from Yreka on the north to San Diego on the south, and cities varying in size from Oceanside, with its 300 people, to San Francisco, the State's metropolis. I understand that 58 per cent of the population of California live within its cities; so that to-day this League represents, in round numbers, very nearly a million people, directly.

Just to see what the detailed workings of the Bureau of Information of the League are, I had Mr. Mason send up to me the other day a large bundle

of correspondence, letters of inquiry from towns, and copies of Mr. Mason's answers thereto. It was really very interesting to note the great scope covered by the questions asked. It seemed as if every town in the State, big and little, wanted some information from us, and that because we are in touch with all the other cities and towns, and gather and compile the information at hand, and compare it. One town wants to know what is the best fire wagon to buy, another whether flush tanks are a success, another what sort of bonds we should issue and how long they should run, and where a good form of bond can be obtained. Another town asks, What sort of a sewer system should we put in? Another, Who shall we employ as an engineer to plan us a good water system, and how many towns in the State have municipal water works? Another inquires about lighting plants, whether they are a success, and what they can be run economically for, and what rate should be charged to consumers. And there are questions about the libraries about licenses, and many others, too numerous to even attempt to outline. I made three pages of finely written notes upon the subject, and I am sure that you will be interested to learn through me how wide a scope this branch of the work has taken. And if you desire information upon any point at any time when we are not in convention, just come to San Francisco to the Mills Building, where you will find comfortable headquarters, somebody to meet you and you will obtain all the information at hand. If you cannot do that, write out your questions and send them to Mr. Mason, and he will either answer them himself or put them into the hands of the proper committee, the Judiciary Committee, the Engineering Committee, the Committee on Legislation, or whatever committee is appropriate, and you will have the best of advice upon the subject. If you desire a form of ordinance of some kind, Mr. Mason can give you a form that has been approved.

If you have a form and want to know whether it is a good one, the Judiciary Committee will advise you. You will always get the latest experiences of the towns upon any matter.

I have gone somewhat into detail in these matters, because some of you may not know the full scope of the League's work. It is a strong League, and it is growing stronger. The movement for municipal improvement, the feeling of the consciousness, so to speak, of the municipalities, is growing all over the country. There are Leagues being organized all over the East. We are not the first State to form a State organization, but others have organized since we have, and the work is constantly widening and extending. People are moving to the cities more and more as time goes on, the cities are getting more and more powerful, and there is a feeling that the future of our country largely rests in the proper management of our cities. We must have honesty of management and true public spirit, we must have clean, decent, well organized, and well managed cities, or we cannot have good people. And if the people of the cities are to control our country, as in fact they largely do now, and their control is getting stronger and stronger because of the drift of population toward the cities, then the work that we have in hand is verily, as Mayor Snyder has said, a valuable one, a tremendous one. I am proud in it, and I am proud to see that so many California cities are interested in it.

As to this south land, we have always recognized that it is a little warmer than the north land, and we have also noticed from the beginning of this organization that you have been more interested than the north in it, and you have stirred up the north by your interest and influence. And we may say that we expect this convention to be the liveliest that we have ever had—especially since I notice that our friend Mr. Devine from Sacramento is now present. We will proceed with

the regular order of business.

Thereupon a special committee on nomination of officers and committees was, upon resolution duly adopted by the convention, appointed by the Chair, as follows: Mayor J. J. Hanford, of San Bernardino, Mayor George E. Catts of Stockton, Mayor Frank P. Frary of San Diego, Trustee Carl R. Briggs of Redding, and Trustee F. B. McKevitt of Vacaville.

There was also appointed a committee to arrange the order of presentation of the subject of oiling roads: Mayor Ey, of Santa Ana, Mayor Snyder of Los Angeles, and Mayor Parker of Santa Cruz, to act in conjunction with the Secretary.

Thereupon an adjournment was taken until 2 o'clock P. M.

Immediately upon reassembling, the committee upon oiling roads reported in favor of proceeding with the discussion of the subject upon the following morning before recess, to be followed by an inspection of the process of oiling a road during recess, and further discussion upon reassembling, which report was adopted.

Upon the subject being reached upon the following day, a discussion thereof was had, as follows:

The President. The hour has arrived for the discussion of the subject, "Oil in Street Construction." Supervisor T. F. White, of Chino, is present, and I will ask him to open the subject.

### **Oil in Street Construction.**

The oiling of roads has come to stay. It has passed the experimental stage as far as its utility is concerned, for that is admitted on all sides. It is now a question of the best methods, and the best appliances. There has also been an important development and advance in its use. Oil was first used on roads, and that only two or three years ago, with the idea of laying the dust, and with that idea alone, a company was formed here, a few years ago, called a "Dustless Roads Co.," and we did our



first oiling in San Bernardino County, by contract with this company. At that time, all which was attempted to be done was to make the dust heavy, by mixing it with a small quantity of oil, so that it would not rise. We have got beyond this idea, and now use oil as an important element in making a permanent road-bed, having a good wearing surface, smooth and firm, free from dust during the summer, and without mud in winter; an approach, in fact, and where the conditions are most favorable, a close approach, to an asphalt road, but vastly less in cost. While we do not claim exclusive discoveries in San Bernardino County, we have worked and experimented along this line, during the last three years, with a very fair measure of success.

I have some exhibits here, showing results obtained in one, two and three seasons, in the use of oil to make a wearing surface; under the varying conditions of different soils, and different foundations. These blocks were cut out of the middle of roads, subjected to constant travel and will convey more information than the mere application of oil, which we are to witness this afternoon. Nos. 1, 2 and 3 are taken from the streets of Chino. The foundation here is loose sand and sandy loam, the sand predominating. This was graded and covered with a surfacing material, which we obtained from the Chino Hills, the same is shown in exhibit No. 4. It is a disintegrated "oil sand-stone," with sufficient clay in its composition to cement the grit and make it pack hard and firm, when worked up with water and rolled.

This gave us, probably, the best results, which we have obtained. This surfacing material is a natural absorbent of oil. It is mostly silicious in composition, and gives good wear. It has sufficient cementing qualities to keep it solidly compacted together; and the oil makes with it, an elastic surface that is firm and smooth, and requires this 3rd year of its life, but little attention to

keep it in repair. No. 1, was taken up the first year, 6 months after the application of oil, we had occasion to cut a gutter across one of the streets, and I saved some of the pieces. No. 2 was taken from another place, where oil was first used in 1900, so that this shows two seasons of oil. No. 3, was cut out from near where we obtained No. 1, and shows three seasons of oil. The quantity of oil used was nearly as follows: 1st season, 120 barrels, to the mile on a basis of 18 feet width of application. 2nd season 70 to 80 barrels per mile; and 3rd season 25 to 30 barrels per mile.

Exhibit No. 5, shows 3 seasons oiling on a surface of loose sandy loam, the sand predominating. Here no surfacing was used. The road is now smooth and firm. When we put on this, the first application in '99, I had no confidence in the oil making a firm road-bed; but thought it would keep down the dust. We put on but one application of about 100 barrels per mile, that season; and all that we accomplished was to lay the dust. But by the following season, I had gained more confidence in oil, and in July 1900, put on a heavier application of 120 barrels per mile; soon after which the surface began to pack and became smooth under travel, and this last summer, 70 to 80 barrels per mile was sufficient to make it firm and smooth, in which condition it has remained ever since.

Exhibit No. 6 shows one season's application of oil to a loose sandy loam surface, similar to that in No. 5. But we had by this time learned more about treating such material, and so put on two heavy applications of 125 barrels per mile each in one season; and accomplished about the same results obtained in No 5, in two seasons. In this instance we now have a foundation, upon which we can make a firm smooth road next season.

Exhibit No. 7 shows the use of oil one season on loose sand—loose to a great depth. In '99, when we com-

enced using oil, we would have considered applying oil to such a surface a mere waste of material. But the possibilities of oil have kept growing upon us, until now we almost look upon it as the great panacea for all the ills to which roads are subject. On this sand we put two heavy applications of 100 barrels per mile each, 12 feet wide. Over this road much hay is hauled; and the farmers told me, before it had become as firm as it is now, that they hauled with more ease, double the weight of hay, with the same stock, that they used to haul over the loose sand. Next season we can make a good road of it on the foundation now secured.

Exhibit No. 8 shows the result of one seasons use of oil on adobe clay. This is the hardest proposition we have struck; to make an oiled road on a tight clay surface. The clay will not absorb the oil to any appreciable extent; and the fine clay dust will not mix well with it, but will ball up and carry off. You will notice the sample shows flakes. After the oil is put on, the first wagon that is driven over it is liable to roll up these flakes in places and carry them off. Here the sanding process, of which I will speak further on, comes in with good advantage, by which a good wearing surface can be built up on the adobe as a foundation, and satisfactory results obtained, something like an asphalt pavement is built up on a previously prepared foundation.

Oil on roads besides aiding to make a wearing surface, preserves the roadbed. It follows therefore, that the road-bed should be carefully prepared, well graded and shaped, and the surface smoothed and packed, as firmly as the material of which it is composed will permit, before the oil is applied. We therefore do our grading during the early part of winter, that the roadbed may have the benefit of the winter rains, and become packed from travel as well as from thorough rolling. We roll after it has become moistened

through. Then in the spring, while still moist, we go over it with a blade grader or smoother or both, and dress up the surface, crowning it as desired; and as soon thereafter as the surface is dry and the weather is settled and warm, the oil is applied; as much in quantity as the material will absorb and mix with. This has reference to a road never oiled before.

It may be desired to put oil on a road that is not in very good shape as to grade and smoothness of surface. It is not recommended to apply oil to such a road, but circumstances may make it seem desirable. In such a road there may be chuck-holes full of dust. To oil it, we go over the holes first; scraping out the dust, filling them nearly full of oil, and then with hoe and rake, work in the dust, together with sharp sand and fine gravel, which are thrown in from a wagon drawn alongside, until the holes are filled from bottom up with oil, dirt and gravel, thoroughly mixed together. When all the holes are filled, we apply a coat of oil to the whole surface of the road. Should the road be very uneven however, and full of holes, we prefer to haul on gravel, of a kind that will pack, and fill up the holes and uneven places, saturate with water and roll, before applying oil. Should the surface of a road be worked up to a considerable depth of dust, if it is of a sandy nature to pack with water and compression, we drench it thoroughly and roll. But if it will not so pack, being of too sandy a nature, we pour on the oil, attempting to saturate all loose material to the firmer stratum below. The only rule we have as to quantity of oil to be applied is to put on sufficient to saturate all of the loose covering of the road, and secure some penetration into the firm roadbed beneath.

After the oil is put on, in any of these instances, some appliance for mixing the oil and loose road material, is run over the surface backwards and forwards until a thorough mixing is accomplished. If a road surface is very



loose, a common steel lever harrow, with the teeth slanted back, is useful. This may be dragged to and fro longitudinally along the road, and back and forth spirally across the road, until a thorough mixing is secured. On firmer roads and where there is little loose covering, a lighter implement, with numerous dragging fingers suspended from an axle, is better. All this has reference mainly to roads that have never been oiled before. When it comes to oiling a road the 2nd, 3rd, etc. seasons, the operation is somewhat different. Should the oiled surface be cut through in places, and chuck-holes formed, (but there will be very few holes if the road has been properly looked after,) we go over these in the manner previously noted for repairing chuck-holes; and then apply a dressing of oil to the whole surface; just enough to saturate the loose material and secure a very slight penetration into the old oiled surface. Here I will call attention to a danger we may fall into, that of putting too much oil on the smooth hard oiled surface we have previously obtained; softening it, and putting it in condition to rut up, especially under heavy loads. We may, in this way, lose a part of the results of the previous years work. I made this mistake on a road last summer, so can speak from experience. But enough oil should be put on to cover the entire surface as with a thin sheet. *Then* there will be a surplus of oil, and the road, if left without further attention, would be sticky and very unpleasant to travel over, for a considerable time after the application. We therefore follow this application on hard smooth roads, that have previously been oiled, with a sprinkling of sand, using fine gravel and sharp sand, such as builders use in their mortars. This takes up the surplus oil and adds to the wearing surface, and renders the road at once comfortable to travel over. The sand soon becomes incorporated with the rest of the road material, and packs down

smooth and hard. The quantity of sand put on is just sufficient to take up the surplus oil, and no more. We frequently use this sanding process also when applying oil for the *first* time to a hard smooth road. We have used it on a macadamized road, in which the surface was too tight to absorb the oil, and obtained excellent results. It is useful also where oil is applied to a tight adobe or other clay road. With the oil and sand a wearing surface may be built up on the clay and be made to last, while without the sand, the oil has a tendency to ball up with the clay dust and carry off. We heretofore have been doing this sanding by drawing the sand in wagons alongside the oiled surface, where two men to the load throw it out with shovels, the shovels being given the proper twist to cause the sand to fall on the surface in a thin sheet. I have now designed a machine that does this work much more evenly and at less cost. It runs on its own wheels, and may be hooked on the side of any wagon. The wagon is driven alongside of the oiled surface, while the machine runs on it, but its wheels travel on the sheet of sand which falls immediately in front of them. Two men shovel from the wagon into the hopper of the machine, and the latter grinds out the sand in a sheet of any required thickness from an  $\frac{1}{8}$  of an inch up.

In oiling a road, whether for the first time or subsequent to previous oiling, we find it most convenient and satisfactory for carrying on the work and to the travelling public, to fix up one side of the road at a time, keeping the travel on the other side; when the side operated on is finished, (oiled, sanded, etc.) we turn the travel on that side, while the other part is worked. In this way, with the plan we now have of finishing an oiled road we have but little complaint from those travelling it.

An oiled road should be kept in repair. If properly looked after and the repairs are made at the right time, the cost is light. Wherever and whenever

the oiled surface cuts through and a hole commences to form, the repair man should start out with oil, sand and shovel, hoe and rake. He should scrape out the hole, run in the oil, and mix it with sand and the material taken out of the hole, until the latter is filled and slightly heaped up. The sand and other material should be thoroughly mixed with the oil to the point of saturation, just short of being sticky. One advantage of sand for this purpose, is that, besides packing down and wearing well, it will hold more oil without being sticky, than any other material. For winter repairing, when the weather is cold and rains frequent, (no reference is intended to the present winter), a pile of sand already mixed with oil, is very convenient, to have on hand. Then if there are depressions in your oiled road where the rain water stands, and where in consequence, the oiled layer is liable to be cut through and mudholes formed, take occasion, when these depressions are dry, to fill them up with this oiled sand, so that the water will be shed from the surface. If your oiled road is in such shape that the water will drain off its surface, soon after a rain, it will take care of itself in the winter time, and go through in fine shape. But if there are depressions and catch-basins in the surface, holding the water until it evaporates, with constant travel over it, you are liable to have trouble, as with any other road, under similar conditions. A sample of oiled sand such as we use in winter repairs is shown in Exh. No. 9.

Various appliances have been used for putting oil on roads. Some have used a modification of the water sprinkler and sprayed it on. When you come to consider this mode of applying oil you will admit, I think, that it is rather crude. In the first place, the oil should be hot when it strikes the road surface. When thrown out in a spray, it loses a great part of its heat before it reaches the road. In the second place, you cannot, by this method, control or

vary the width of application with any exactness. And in the third place you cannot control and vary the quantity of oil applied. In this connection too, you will perceive that where oil is put on with the common sprinkler or a modification of it, the flow through the same openings will be much greater when the tank is full, than when the oil has mostly run out, since the pressure will be much greater. All of these points are important, especially when it comes to putting oil on a previously oiled road. Here the temperature of the oil, the width of application and quantity applied, must be brought down to some exactness. On a loose surfaced road, that has not previously been treated, there is not much danger of getting on too much oil, but even here, economy would suggest some control of the quantity.

Besides the common sprinkler, the "American Dustless Roads Co." have a machine upon which I believe they have a patent for putting oil on roads. Probably many of you are familiar with it. We did our first oiling in San Bernardino County with this machine. I have seen it do good work on loose roads. When we come to the exhibition of oiling roads this afternoon, you will see another machine, which we think has a large range of possibilities, for the work, which is under exact control as to width of application, quantity of oil discharged, etc.

A word as to heating oil, I have heard there are some who claim there is no advantage in heating oil. Now the object of heating oil is *not* to produce any chemical change in its composition, or to cause any chemical union with the material of the roadbed. The action of the heat is entirely mechanical. It causes the oil to become thin and active, like water. In its natural state it is thick and sluggish. We can easily understand that it will penetrate more deeply and mix more readily with the road material when it is thin and active. For the same reason the weather should



be dry and warm, and the roadbed itself warmed by the rays of the sun, when oil is applied. Should you attempt to put cold oil on a cold roadbed, on a cold day, as we sometimes have to in making winter repairs, you will get warm yourself with exasperation at the slowness of the process. You will think of various slow things by way of comparison, like cold molasses, the proverbial messenger boy, etc. Nevertheless, good results may be obtained in the use of oil that is not heated, except by the sun, when used in hot weather, on a hot roadbed, but even then it would work much better if heated. The conditions are ideal in the use of oil on roads, when the oil is hot, the weather dry and warm and the roadbed warmed from the rays of the sun.

As to the kind of oil used, we have obtained the best results from a Los Angeles crude oil of 12 to 13 grav., and containing not more than 2 per cent of water. We have also obtained most excellent results from the use of Puente residuum of 17 grav. and no water.

I have thus gone hastily over some of the main points of oiling roads. The subject is a large one, and we can but skin over it in the limited time we have. We, in San Bernardino County are encouraged over the results so far obtained, but feel that there is still much to learn.

### General Discussion.

Trustee James H. Devine, of Sacramento. To secure a permanent road by this system, Mr. White, about how much would it cost per mile?

Mr. White. It is a very hard matter to answer that in dollars and cents, because the cost of oil varies so much in the different municipalities.

Mr. Devine. It is a very important item, however, in the construction of this kind of road.

Mr. White. In San Bernardino County, our oil cost us last year \$1.22 a barrel. We made our contract a little

too early, paying 90 cents on board cars in Los Angeles, and the freight was 32 or 32½c. I will give you some instances from recollection of what the oil cost us.

Mr. Devine. All I wanted to get at was about how much it costs per mile, approximately.

Mr. White. Keeping in view the price we pay for oil, in one district we treated 12½ miles, 6½ being new road, territory that had not been oiled before, and where of course a good deal was put on, and 6 miles of which had been treated before.

F. B. McKevitt, of Vacaville. How many times had that been treated before?

Mr. White. Only once during the season, and just one season. There were put upon those 12½ miles, 1300 barrels of oil. The quantity put on ranged from 25 to 30 barrels per mile on some of the roads, up to 200 barrels per mile on some of the new roads. This cost a few cents over \$160 a mile average for the whole 12½ miles.

Mr. Devine. Including labor and all expense?

Mr. White. Including everything.

Mr. Devine. This was for one oiling, of course?

Mr. White. Yes; for the season.

Mr. Devine. About how often do you have to go over the road to secure a permanent road?

Mr. White. I have here a number of samples, to which I have already referred in the paper, and if you will examine them, you will learn something about that. It depends entirely upon the material in the roadbed. This was on loose sandy surface, this sample, and this one is of the same material treated to one heavy application, and then a light dressing afterwards, just before the winter. This one was treated last July, and nothing has been done since, while with this sample, there were only 25 to 30 barrels put on per mile.

Mayor Frank Ey, of Santa Ana.

How does the oil upon the roads affect rubber tires, such as the tires of bicycles, automobiles, etc?

Mr. White. When the roads are properly treated, or, as we think, properly treated, as we treat them now by following the oiling with a sanding, of course the sand and oil will be a little loose for the first week, but the oil does not pick up any. After a week or ten days, it packs down hard and smooth, such as you see here, like asphalt. The oil will injure rubber if the vehicle goes on the wet oil, but with the sanding process, the roadbed is left dry, and we have not had any complaints in that direction. The first year that we worked at it, we put the oil on and left it on wet, and we had a good deal of complaint, but now we have none at all.

Mr. Ey. Is there still a chance for a law-suit, such as there have been in the past, by parties claiming a royalty for the use of oil in streets?

Mr. White. We put down our oil in 1899 by contract with the Dustless Road Company. They claimed to have patents on the use of the oil. In the year 1900, we thought we knew enough about oiling roads to undertake it ourselves, and we did do it ourselves. The Dustless Road Company sent us a bill, claiming a royalty of \$15 a mile. We pigeon holed the bills, which kept coming regularly, and that is all that has been done about it. We corresponded with some other counties, with whom they had put in similar claims. I was rather alone on the Board at the start in objecting to paying this royalty, as they thought it would be better to save the trouble of a possible law-suit. But it seemed to me so unreasonable that a patent should be granted upon the use of a natural product that would stand in the courts that I made strong arguments against the royalty, and the Board finally agreed with me, especially inasmuch as the District Attorney told us that all that the company could recover would be the royalty, in any

event, and the costs of suit, which would be very light. They have not commenced suit against us yet.

The President. Gentlemen, Mr. Mattern, who is the patentee of this process, is present, and, although not a delegate, I presume you would all like to hear from him. I will ask Mr. Mattern to address you.

Mr. Mattern. I wish to say that I endorse everything that Mr. White has said in regard to making oil roads. He might have elaborated a little more in regard to the quantity of oil, and also as to the claim that the patent makes, that it is a road builder. In the patent we claim that it will make a road; that it is not only dustless, but it is elastic under the hoofs of animals, and that it is a road builder. In answer to one of the questions that was asked, I will say that rubber will not be injured by oil any more than it will by water or any other such liquid. Rubber is used in the oil fields in the way of pipes and belts, and so on, as it is the best material. This oil is a neutral oil, and does not, therefore, affect the rubber particularly. It is not an oil that becomes rancid and eats up the rubber—not at all. In regard to royalties, the California Dustless Road Company of this city is operating under a license. The original patent was sold to the Dustless Roadbed Company, of Camden, New Jersey, whose province it would be to commence suit, if one were to be brought. The corporation is a very wealthy one, the Pennsylvania railroad system being a large holder in it. The president of the company has informed me that twenty-six of the largest roads in the country are using the method, and that the attorneys of those roads have endorsed it to their companies, so that they are paying royalties.

The President. How much royalty?

Mr. Mattern. They pay royalty simply on the roadbed.

The President. How much per mile, say?

Mr. Mattern. We have asked \$15.



The President. \$15 per mile?

Mr. Mattern. Yes, per year. But this year we propose to lower it and make it very liberal.

The President. That would be prohibitive, I think.

Mr. Mattern. It has not been prohibitive so far.

Mr. Devine. Is there any other process that will answer nearly as good as this, upon which the town or county would not have to pay a royalty?

Mr. Mattern. I think it is nothing more than right that the inventor of this plan that is of so much benefit, and will be of greater benefit, should have a little return for the benefit conferred. I have worked 15 or 16 years at it, and have made applications upon all sorts of roads, in order to establish it.

Mr. Devine. I presume the county or state would have a right to try and experiment.

Mr. Mattern. Certainly. We have spent thousands upon thousands of dollars showing this thing up, and years of time, and we only ask a little recognition at the hands of users.

The President. If Mr. Iverson, of Redlands, is here, we would like to hear from him upon the subject.

Mr. George Iverson. What I might say, gentlemen, would simply be corroborative, since it seems to me that Mr. White, our San Bernardino County supervisor, has very well covered all the ground, and I heartily endorse all that he has had to say. In Redlands we commenced the use of oil in the year 1899, covering about ten miles of street that year. The second year, we liked it so well that we extended the borders a little, and put in about 15 miles. In the year 1901, we have covered about 25 miles of road. Are we satisfied with the use of it? Yes, most certainly we are. We find that it is more economical than any other. We find that after the first week, as Mr. White has told you, it does not stick to the buggy tires. I took a little ride on a street car out towards Westlake Park yesterday, and

I note that you are still using water here. I must say that I do not know what the reason is, for your oil is very cheap in Los Angeles, and you have it right upon your own premises, you might say. Why you are not using it in all of your suburban districts is to me incomprehensible.

Mr. Devine. Because water is cheaper, I presume.

Mr. Iverson. Let me tell you something about the relative expense of the two with us in Redlands. It costs us at the rate of \$4 a day for a man and sprinkling cart with team. It costs also \$1 per day for each sprinkling cart for the use of water. That is the water expense.

Mr. Devine. Does the man supply team and sprinkling cart for \$4 a day?

Mr. Iverson. Yes. They charge us \$4 a day, and furnish cart and team, and we pay for the water.

Mr. Devine. It seems to me that that is certainly cheap enough.

Mr. Iverson. There are 26 days in the month, we will say, and at \$5 a day, as we only use one sprinkler, and that in the central portion of our town over our pavements, and some few outlying streets, that amounts to \$130 a month. We were told when we put down our asphaltum pavements that oil was injurious to asphaltum, and consequently we have kept it as far away from the asphaltum pavements as possible. I doubt very much if it is really injurious to the asphaltum, but we have kept it away.

Mr. W. F. Heatham, of Santa Ana. How much of an odor comes from an oiled road?

Mr. Iverson. The first few days after it is applied, there is quite a perceptible odor. After that there is none whatever; you would scarcely detect it at all.

The President. You have not yet given us the comparative cost of oil and water.

Mr. Iverson. I did not expect to say anything upon the subject before this

convention, and so I have not prepared myself with the figures definitely. But the cost of water, as I say, would be \$130 a month, and, as we cannot get along with less than eight months' water in the year in Redlands, that would be \$1040 per sprinkling cart for a year. Two miles is about all that one sprinkling cart can cover properly. What is the result of that: It is that water costs us in Redlands one-half of \$1040, or \$520 a mile, and we can sprinkle with oil there at a cost not exceeding \$200 a mile. We do not sprinkle with water on Sundays, and those streets are dusty in traveling over them on Sunday, while the oiled streets are dustless all the year round.

Mayor W. H. Turner, of Merced. Moreover, when you get through oiling, you have a good hard road.

Mayor B. Morse, of Riverside. What is the capacity of your watering carts? How many hundred dollars do they carry to the load, and how many loads of water can they sprinkle in a day?

Mr. Iverson. The capacity of our watering tanks is about 15 barrels, but the number of tank loads a day is more than I can tell you.

The President. How would this system do in Northern California, or in Oregon, where they have so much more rain, in your judgment?

Mr. Iverson. My experience at Redlands leads me to think that oil applied in sections of the country where there is lots of rain would not do as well as it does in Southern California, because I believe that, to a certain extent, rain is damaging to the surface of the road. Mr. White has told you about the cost of oil the first year, that it is always more than the second and third year. That is true, because, while the surface of the road may become dusty, yet there is a residuum or portion of the previous year's oiling that remains. But in the case of a very rainy country, that might not be so, at least not to the same extent.

The President. Suppose it rained

for a week on the best road you have got?

Mr. Iverson. We have in Redlands roads that we oil clear out to the gutters, while some others are only oiled from 12 to 18 feet wide. It all depends upon the street and the amount of travel upon it, and the improvements made along it. Suppose we cover a roadbed 18 feet with oil, and leave a margin and the gutter of say 6 feet. The roads are crowned up, and the water naturally runs toward the gutter on each side. If you take a look at our streets of that character to-day, you will find that the water runs off from that oil and leaves no perceptible mark, but that just as soon as it drops over the edge of the oil on to the unoiled portion of the street, you will find little seams all the way down to the gutter.

Mr. Morse. Then it is really a benefit instead of a detriment?

Mr. Iverson. Yes, sir.

Mr. Morse. That is my experience in our town also, after heavy rains, Mr. President.

The President. What do you call a heavy rain?

Mr. Iverson. We have had nearly two inches of rain so far, and we had an inch of that at one time, and that is a pretty fair one down this way. After the rain, I noticed the effect of the water on the street, going over it just after the rain particularly for that purpose.

The President. Will not the tires cut into it after such a rain?

Mr. Iverson. Of course, the top of the roadbed was a little soft, but the softness did not reach deep down into the oil.

The President. It does not break the skin or oiled portion?

Mr. Iverson. No.

Mr. Devine. Suppose there were depressions in the road. Would it not fill up those depressions, and then would not the oil tend to stain and discolor whatever it came in contact with?

Mr. Iverson. It is not put on as



heavy as that. I have watched the process. The soil takes it up very quickly. I have driven over it and followed the oiling cart as it went ahead, and turned off the road, many a time.

City Attorney C. N. Kirkbride of San Mateo. I want to ask the gentleman how he would prepare the surface of his road in cases where it was customary to use rock that had been broken up with a crusher, so that the pieces were possibly 2 or 2½ inches in size, for a foundation, and the town has the facilities for breaking that rock finer, if desired? How would you go about building a road where you ordinarily used rock of that consistency?

Mr. White. Does your question imply that you cover the surface of the roadbed over with this material, or is that the natural material?

Mr. Kirkbride. In cases where it has been your habit in making roads to bring broken rock and dump it on the street for the surface.

Mr. Iverson. We have never made any experiments of that kind, never having used broken rock in that way. But I believe that if I were going to work at that question, I would first put on the crushed rock, or rock of whatever nature it was, then I would use, as Mr. White has suggested, the sand on top of it, to give a wearing surface.

Mayor J. P. Parker of Santa Cruz. With reference to the rain, I would like to ask a question of some gentlemen who can answer it. We have a good deal harder rains in Santa Cruz than an inch at a storm. I would like to know what the effect of a rain of any where from 1 to 7 inches would be on an oiled road, even if the road is well crowned and well oiled, without chuck holes or anything of that kind.

Mr. Iverson. I think you will find, with that kind of a road, with the conditions that Mr. White speaks of in his article, that the water would flow from the center of that street to the gutters, as water would run off a duck's back.

Mr. Parker. Would heavy teaming constantly going over that road, and a rain continuing from one to six days, say, affect it? Would not the wear and tear on the crust of oil in such a case cause it to break through?

Mr. Iverson. It might.

Mr. Parker. Would not the tires sink through it, and would not the entire road surface be torn to pieces?

Mr. Iverson. No, I don't think so.

Mr. White. Permit me to explain that, by giving some instance. In the first place, let us take a heavy dash of rain, and in the second, a long continued rain. In November of 1901, we had a very heavy rain in Southern California. At Chino we had 6 inches in one night, and 10½ inches for one storm. The whole country was flooded, and it gave us a good test of our oiled roads, so as far as a heavy, dashing rain is concerned. There is a road running into San Bernardino that descends from a bench down into a creek perhaps 300 to 400 feet in height, on a grade of about 6 per cent. The road had been oiled a second season, and there was a good oil surface. The water rushed down the middle of that road, because the ditches could not carry such a great volume of it, and did not make a scratch on the road, but a half mile south there was a road of about the same grade which was washed so badly that it could not be used until it was repaired—a road that was not oiled. Between Pomona and Freeman, there was a great quantity of water come from a canyon and struck the oiled road at right angles at one point. It came from the west, and on the east side of that road there was a margin of 6 or 8 inches of the surfacing material that the oil had not touched, and the rain passed over the oiled surface, and when it came to that which was not oiled, it cut it right out. Upon the same road, within the city limits of Pomona, the road was surfaced with decomposed granite, packed down hard, and a very nice road during the summer, but it had not been oiled. The

# White Road-Oiler.

(PATENT APPLIED FOR)



**DESCRIPTION:—** The oil is run from tank into receiving box, in which it is kept by the operator to a certain level, to insure uniform pressure on discharge pipe and secure the same flow at all times through the same openings. Valves operated by levers admit the oil to, or cut it off from, the discharge pipe. Gages on the latter regulate the width of application and quantity of oil discharged with exactness.

## **SOME OF ITS FEATURES:**

Convenience in handling.

It covers the whole surface evenly.

Regulation of width of application to 18 in., 36 in., 54 in. & 72 inches, the latter being the full width of the machine.

Exact regulation of the quantity of oil discharged from the minutest stream to 200 bbls. per mile, if put on 18 feet wide.

Strongly and durably made.

**For further information and price, address**

## **White Road Oiler Co.,**

### **Chino, San Bernardino Co., Cal.**



same storm cut it all to pieces, and one stretch of a quarter of a mile was such that the road material was fairly washed out into the fields alongside the road. That illustrates how an oiled surface will stand under a dash of rain. Then, in regard to a long continued wet spell: In one place in Chino, there is a high brick building on the south side of the street, and during the winter time the sun does not reach the surface of the street there at all. There was a slight depression in the oiled surface there where the water stood, and, though that was in 1900, when we did not have a great deal of rain, yet the rains came along at intervals so that it kept wet, in one spot remaining so for two months, water standing there. The result was that the water cut through in that depression with the constant travel and the water standing on it. But it dried up very soon, and then I took some of that oiled sand and scraped out the mud at some depth, and put on a layer of two or three inches of that oiled sand, and that sand packed down, and last winter, when we had a good deal more rain than the winter before, we had no trouble at all. So I would say that the first season the road may cut up somewhat, because you have not secured much of an oiled surface. But the second season, if it is crowned up so that it will drain the rainwater off directly after a rain, the oiled surface will preserve the roadbed so that it will go through in fine shape.

Mr. Ey. Does the City of Redlands use its own system of sprinkling oil, or does it pay a royalty to the company that does that work?

Mr. Iverson. They have used the Camp machine, and of course that carries with it the idea of royalty.

Mr. Ey. You pay a royalty, then?

Mr. Iverson. Yes.

Mr. Devine. Have you paid any up to date?

Mr. Iverson. We have not for the year 1901.

Mr. White. In regard to the question

of royalty, I think the Dustless Road Company is entitled to much credit, but when it comes to a royalty, I do not think their claim will stand for a moment. As I said before, we have paid no attention to their claims. The Academy of Sciences of Southern California issued a bulletin last year taking up this subject of patents on the use of oil on roads, and they discussed it pretty thoroughly, opposing the idea of the patent being valid. They did not question that they had a patent, but they took the stand that it would not be held good in the courts, and I judge the company is afraid of trying it there, because they have never brought any suit to test the matter, as far as I know.

At this point a recess was taken, to meet at 1:30 o'clock P. M. on Bond street between 14th and Pico, whither the members of the convention repaired, and there witnessed the oiling of the street.

The convention reassembled at 3 o'clock P. M., whereupon the subject of oiling streets was resumed in discussion, as follows:

Mr. Sprague, of Los Angeles. Mr. President, I desire to raise a question connected with the oiling of streets, for information and discussion on a particular point, and that is whether experiments have been made which have been sufficiently conclusive to enable us to determine positively whether it is essential to heat the oil before applying it to the road. I have raised this point as I have been investigating this subject for the last two months with two of the expert chemists at the refinery here, both of whom assured me that they had made experiments with the application of cold oil to the roads with very excellent results, and they put the matter in this way: That the surface of the road should be moist, but not saturated with water; that then the oil ought to be put on cold and thoroughly mixed with the surface material, so as to be thoroughly incorporated, as the oil is with the soil in that part which is used for repair

purposes. Then a roller should be used, or not, according to whether the travel is of itself sufficient to consolidate the road, they urging that the evaporation of the water, together with the evaporation of the lighter part of the oil, which is the solvent or the asphalt—the evaporation of those two would serve to leave the road solid, cause it to pack down hard. The application of oil, even if heated, to a dry surface, they say would not permit the thorough mixing of the oil with the soil. Therefore they assured me that the oil could not be made hot enough to secure the great penetration claimed for it, and when it became cold, if it had not become thoroughly incorporated, it would then be far more difficult to mix with the soil than before the light oils had been driven off, as it would then have a waxy consistence. I confess the argument seems to me very good, and I am not aware that experiments with results adverse to those have been made. So I raise the question for information.

The President. Can any one answer Mr. Sprague's question?

Mr. Morse. I would ask him if the test that he speaks of has been made on a road where it could be seen?

Mr. Sprague. I only saw it on Santa Fe Avenue south from 9th in this city. That road I observed myself, and found it in very excellent condition. As to other roads, I do not know their location. But certainly the argument seems to me to be good. And, Mr. President, if I may take a moment further to urge the extreme importance of this matter, I would suggest a series of experiments with a view of obtaining with the accuracy that scientists give us when determining questions of great importance, the exact results of oiling streets. For instance, a certain Board of Supervisors from the north came south to determine how to put oil upon roads during this past year. They went back home and made a great mistake, after all the care they had taken to determine how it should be done. And so mistakes are

being constantly made. I suppose half the oil which has been applied to roads has been misapplied, and the public in towns where those experiments have been made are naturally cursing it, and saying that it is a total failure.

The President. What was the trouble in the instance you speak of?

Mr. Sprague. Simply this: The road had been very well graded two years before, but, being very much traveled, was considerably worked up in the meantime, and was not by any means a perfect grade. The very heavy travel had made from 3 to 7 inches of fine dust on the surface. Oil was put on top of that dust. It was heated as hot as could be heated and drawn 5 or 6 miles and applied, but it lay on that dust in pools, and below those little waxy pools of oil was dry dust again. It did not incorporate with the oil, which remained there shining and blinking in the sun for weeks, and gathered on the the buggy wheels, and made the whole country wild with despair. Of course, that was as bad a mistake as could be made. It is one that has been frequently made, but seldom to such an extent.

The President. What did they do with it?

Mr. Sprague. They put on dry material, but the more they put on, the more it mixed with this waxy stuff, and did not consolidate. As I understand it, you must in the first place have a road made up properly, and secondly, the soil must be consolidated thoroughly hard; and, thirdly, the oil must be applied in such a way as to thoroughly incorporate with the surface, and pack down hard and firm. Those are the requisites, as I understand it, and the question is, how to secure just those conditions on all the different kinds of soils which constitute our country roads. For I believe that it is possible to so apply oil to adobe, to sand, and to all sorts of road material, so as to make an almost perfect road in each case without any surfacing. It is my belief that that



is possible, and, if so, it is one of the greatest discoveries of the last half of the 19th century. The traffic manager of one of our railroads said to me that one of the most difficult things they had to do was to meet competition in local hauling, with distances from 10 to 30 and 40 miles, by team. If that is the case with the roads in the condition that they have been in in past years, what will be the effect of the competition which can be secured when we get roads with oiled surfaces?

The President. Mr. White is here now, and I think if you repeat your question; he may be able to answer it, Mr. Sprague.

Mr. Sprague. My question is, whether the application of oil to roads with a surface somewhat moist but not saturated with water—as moist as an orchard surface is when it works well—the oil put on cold and thoroughly incorporated, and then consolidated, either by travel or by the roller, or by both—whether experiments have been made which demonstrate whether or not such a process is satisfactory?

Mr. White. They have not made roads just that way in my county, but we have attempted to put oil on a road when the surface was somewhat moist, in foggy weather (the surface being moist from the fog merely,) and we find it very difficult to do satisfactory work under such conditions. From time immemorial we all know that it has been said that oil and water will not mix well. So when the road material is moist, the grit will not mix well with that, and it will not begin to unite with it until all the moisture is dried out. Then it will begin to unite from the travel. Of course, you can mechanically mix oil with moisture, and get the particles of oil mechanically through the moist dirt. But the oil will not unite with it and make a satisfactory surface until all the moisture is dried out. That has been our theory.

Mr. Sprague. I do not think that meets the case. The theory upon

which we are proceeding—and I may say that this is at the suggestion of two of the experts, both agreeing, chemists at the refineries here in Los Angeles, who have made applications in this way—is that the advantage of the method of mixture I have suggested is that it would more thoroughly mix with the surface than when dry; that the mechanical mixture will be more complete; that the evaporation of the moisture which will go on from the heat of the sun will tend to do two things, to evaporate the moisture and so consolidate the mass, and evaporate the lighter portion of the oil which is holding the asphalt in solution. These experts have said, and with a show of reason, that if you heat your oil in the first place to 180° or such a high temperature as you desire, you drive off the lighter portion of the oil, which is of course true, and just as soon as your oil shall have cooled, you will lose the valuable assistance of the lighter oil in holding the asphalt in solution until it is thoroughly incorporated with the road material. I confess that is a pretty strong statement, and I would like to see tests thoroughly made demonstrating whether or not it is correct.

Mr. White. In heating the oil we heat it by steam, and we do not get a temperature much exceeding 180° to 200°. That drives off very little during the time it is being heated—it drives off all the water there is in the oil, and the oil that we have been using contains but 2% of water. As to whether the hot oil will unite with the road material or not, depends a good deal upon the nature of the road material. It will not unite with a clayey soil as well as with a sandy soil, of course—it will ball up. We have not found any other material, however, but what it would unite with. The best material for making an oiled road for a neat surface, where you do not dress it with any other surfacing material, as we find, is one that is gravelly and

sandy, but that has sufficient cementing properties about it so that when it is wet and rolled down, it will become very hard and firm, but still porous enough to absorb the oil. We find that hot oil unites with such material very readily, and the hotter it is better; that is to say, it does not need to be more than  $200^{\circ}$ , but at less than  $150^{\circ}$ , it does not unite as well as does at a greater temperature. When properly heated, the oil becomes thin and active, like water, and will unite with such sandy and gravelly material very readily indeed. But with a clay dust, it does not unite well, and we overcome that by sanding the surface after applying the oil, and that, by giving character to the dirt, makes it mix better.

The President. Gentlemen, while we were observing the practical demonstration today upon Bond Street, a gentleman connected with the Street Department here, Mr. Giffin, called the attention of the delegates to the other end of that block, which was oiled last November with just one coat of oil, without any grading, as I understand it, and no sand put on top of it, and without the use of the regulating machine. He also took me out on Oak Street, and showed me a place where oil was sprinkled during a rainy day; that is to say, the rain came on just after the oil was put on. He said he was afraid to go out and look at it afterwards, but he found it in very good shape, after all. So I asked Mr. Giffin if he would not come down to the convention and let us ask him a few questions.

Mr. Ey. Mr. President, our Board of Supervisors went on an investigating trip some time ago, looking after the sprinkling of county roads with oil, but they have done no sprinkling since. A year from now, I hope Santa Ana will be able to tell you that we have done work of that kind. I would like to ask a question as to when is the best time in the year to apply oil, and also with reference to this question upon which

there is a difference of opinion, as to whether there should be some moisture in the road material when the application is made, or not, and whether cold or hot.

The President. Perhaps Mr. Giffin will be able to give you some information upon that point.

Mr. Giffin. That is a hard question to answer. We have put oil on roads that have been sprinkled with water 24 to 46 hours previous, and have met with good success in each instance.

Mr. Ey. Then you put it on at any season?

Mr. Giffin. Any season, yes.

Mr. Ey. Should it be put on cold or hot?

Mr. Giffin. As far as my experience goes, it is always hot oil that is put on. We always put it on as hot as we can get it into our holding tank before we start away, and the temperature in such case will never run less than  $200^{\circ}$ . In boiling my oil, I observe that I always use about 10% by evaporation; I have always had to put in about 10% more oil than I wanted to put on the road, and I find that the oils have been boiled the longest evaporate most of the volatile substance, and those oils give us the best value in coating the surface of the road. On one street that we oiled, it was sprinkled with water in the afternoon previous to the morning that we put the oil upon it, and the day after oiling we had a heavy rain storm—it was the last general one we had through Southern California—so that we were a little afraid of the result, it being supposed that it would probably be washed away. Our surprise was great when we found that the water had run off from the oil. That was the street that I took you out to see, Mr. President, and it is in fine condition. Moreover, I want to call attention to the fact that that street was not in shape we wet it to put the oil on, We have really not had a fair chance here to show what we can do, because of that fact.



Mr. Ey. Had not Oak Street been graded?

Mr. Giffin. Yes, but it was all covered with dust, and most of that soil out there is inclined to be adobe.

Mr. Ey. The same kind of material as on Bond Street?

Mr. Giffin. Yes, and the dust was running all the way from 3 to 4 inches deep over the road.

Mr. Ey. What was the cost of this work on those three blocks?

Mr. Giffin. We put on about 50 barrels of oil on the three blocks, and it cost the city \$1.05 a barrel put on the street.

Mr. Ey. What is the length of the blocks there?

Mr. Giffin. I could not say as to that.

The President. I should say about 1200 feet.

Mr. Giffin. Approximately 1100 to 1200. We put 50 barrels of oil on that 1200 feet. The dust was very thick there. As to the labor of putting it on, that is nothing at all, except one teamster and driving a team over it. As soon as he gets to the point to be oiled, he has a lever which he throws over and that starts the oil running.

The President. What kind of a sprinkler did you use?

Mr. Giffin. There will be one up here of the kind I am using in half an hour or so.

The President. Can you not describe in what respect it differs from Mr. White's?

Mr. Giffin. It is just like a sprinkler used on one of the watering carts, a round bulb, open from the bottom to the center, and it throws out a spray of oil. It comes out in a fine spray, and it goes upon the road just as if it was a sheet of water.

The President. What advantage has it over the White apparatus?

Mr. Giffin. It is much more simple, and cheaper to handle?

The President. Does it distribute the oil evenly?

Mr. Giffin. As to that, I would not

say. It distributes it just as evenly as it can be done with an uneven surface.

The President. Do you use a fine rock afterwards?

Mr. Giffin. No sir. We started in to do that, but we abandoned it.

The President. Or put in sand?

Mr. Giffin. No sir. The first sand I ever saw applied was to-day.

Mr. Morse. How wide a strip does the machine cover?

Mr. Giffin. A strip about  $7\frac{1}{2}$  feet wide.

Mr. Morse. How many trips do you go up and down the road?

Mr. Giffin. Twice over the road.

Mr. Morse. Then you make your oiled portion about 15 feet wide?

Mr. Giffin. About 14 feet wide. We always aim to have it lap a little at the middle.

Mr. Morse. Then for that strip of about three blocks in lengthy, oiled 14 feet wide, it cost you at about the rate of \$425 per mile?

Mr. Giffin. Yes. That is an exceptionally large amount of oil, however.

Mr. Ey. What did you not have that wet, when you claim it is so much better to have it wet?

Mr. Giffin. We have experimented upon other streets where we have dust, and have applied water—the street I was speaking about was where we did apply water, and there are other streets where we have put it on, and it requires more oil with the dry dust; but we did not have enough water on hand to settle all the dust in one case.

Mr. Ey. If you were putting oil on a street again, you would settle the dust before you put the oil on with water, would you not?

Mr. Giffin. I would remove most of the dust first, and then what was left, I would sprinkle over with a light sprinkling of water.

Mr. Ey. Do you mean to say you would carry the dust away from the street?

Mr. Giffin. Yes, because I do not believe it makes a good road.

Mr. Ey. How would you do away with it?

Mr. Giffin. If there was a large amount of dust, and it was not so situated that it could be removed, I would wet it down very thoroughly, and give it a chance to pack, if I had to wet it three or four times on different occasions in order to let it do so.

Mr. Ey. Would you not always put water on first.

Mr. Giffin. Yes, I would. After putting the water on, I would want to give it an opportunity to dry out some, in order that the oil might settle in it when it is put on.

Mr. Ey. How long would you wait after sprinkling it with water?

Mr. Giffin. Not less than 24 hours, and from that on to 48.

Mr. Ey. On what character of soil?

Mr. Giffin. Such as you saw this afternoon.

Mr. Ey. That is pretty hard soll. What would you do with loose soil?

Mr. Giffin. The road that we put it upon this afternoon is a road that has been sprinkled every day, and consequently that is a hard bottom. But from the end of the portion where we sprinkled on out, there was a street that the dust had not been laid by sprinkling upon for months, and the dust is from 2 to 4 or 5 inches deep all over.

Mr. Ey. You did not put any water on first in this case?

Mr. Giffin. No, not on that street. We tried it a few times, different ways on different streets, and I find the most even and best surface, so far as our experience goes, is obtained where we sprinkle first with water, and then the next day, generally, put the oil on.

Mr. Kirkbride. How far can you haul the oil and have it retain its heat?

Mr. Giffin. From our heating tanks down about 14 miles from town, and it is then hot enough to apply to the road, but not as hot as it really should be.

Mr. Kirkbride. Do you know how hot it is when you apply it in such

cases?

Mr. Giffin. No. We never tested when we got down that far.

Mr. Kirkbride. You think the heavier oils are the best for this work?

Mr. Giffin. Yes.

John F. Hopper, of San Leandro. I would like to ask a question with reference to the use of oil on what is called rotten rock. We have a great deal of that in San Leandro, and when it is dry, it makes a very durable road, but when it is wet it gets bad. We have come down here from San Leandro more to find out what can be done to get nice, clean streets, than anything else.

[The proceedings were here interrupted, but the question was answered later.]

Mr. White. I will say that a road that has been previously oiled requires only from 20 to 25 barrels of oil a year, and I would like to ask Mr. Griffin, How would you regulate the quantity with your oiler, and also, in the same connection, how do you regulate it so as to get the same quantity when the tank is full as you do when the oil is mostly run out?

Mr. Giffin. As to the first question, I will say that we either drive our team a little faster or slower; that is regulated by the teamster. And there can only be a certain quantity of oil come out of that three-inch pipe in a certain length of time, and it will run almost as fast when there is only a half a barrel left in the tank as when it is full. That has been our experience with the pipe that runs through into the sprinkler.

Mr. White. It cannot regulate, then, to any exactness?

Mr. Giffin. No, not to an exact amount.

Mr. Ing. What is the practicability of oiling a macadam road?

Mr. Giffin. I never could see any.

Mr. Ing. How about the idea of keeping down the dust?

Mr. Giffin. What little I have investigated leads me to believe that it is



not useful to attempt it upon macadam roads, because you can take a paved road of any kind and dust will settle upon it anyway, and we have to keep that sprinkled in order to keep the dust down that comes from the sweepings of stores and teams running over it.

Mr. Ing. It is only of use then, you think, on earth or sand roads?

Mr. Giffin. Or on roads that otherwise would be dusty.

Mr. Sprague. I would respectfully beg to differ from the gentleman in regard to this last conclusion of his. At Columbus we have a road so hard that it would almost crush a piece of iron, but the continual travel over that road will work up, in the course of a few weeks, a quarter or half inch of that road into dust, and the next wind that comes along blows it away, or takes it along the road. This happens where they have these very hard roads, and if there is any way to prevent that, it should be prevented. I do not see any reason why we should not apply oil to such roads, which are in effect macadam roads. I believe it will double the value of such a road, and make it far more tolerable in all conditions of weather.

Mr. Ing. The reason I asked that question is that in Sacramento our streets are being improved by the macadam process. We got crushed rock from the Folsom State Prison, and we find it very advantageous. There is more or less dust on the roads, as said by the gentleman who has just taken his seat. In order to keep the streets up after the city has accepted them, we have to apply more or less fine rock. We have two or three streets in Sacramento that we would like to try this experiment upon, provided we are sure we would not ruin the street.

Mr. Giffin. Of course the street will wear away the same as any other street.

Mr. White. I can tell the gentleman something upon that question, I think. There is a road running from San Bernardino to Colton, that is packed down very, very hard, macadamized. When

we put the oil upon the road, the surface was very tight and it was very hard to make it absorb the oil. But we put on a good dressing of oil and followed it with sand. That packed down and made a surface like an asphalt surface that worked well all through the summer. Just on the south end of a road of which I have spoken, within the city limits of Colton, they did not put oil on it last year, and neither did they put water on it. Their funds were short. It became very dusty, and there got to be holes in many places in it. There was a good object lesson for the use of oil on a macadamized road. When you traveled over the road inside the county limits, it was hard and dustless, but as soon as you crossed the city limits, you got into a cloud of dust and a very rough road. And that was all, of course, the same character of road material.

Mr. Morse. I want to ask two or three questions which I think are applicable. Mr. Giffin says he applied at the rate of fifty barrels of oil to three blocks, which approximates 225 barrels per mile. I want to ask Mr. White how much it costs per mile for the width of 14 feet, the same width as spoken of by Mr. Giffin, upon a dry road that has not been sprinkled—the one spoken of by Mr. Giffin had been sprinkled. I want to get at the relative cost between the two.

Mr. White. It depends upon the condition of the surface. If it is a rough surface, it requires a good deal, rough and soft, while if it is hard, it will not take so much. We were putting on the street in our oiling this afternoon at the rate of 100 barrels per mile for an 18-foot roadway. If there had been much loose material on that, it might have taken 150 barrels per mile.

Mr. Morse. In other words, you can put the oil onto your dry, sandy roads without sprinkling with 150 barrels per mile, when Mr. Giffin speaks of using 225, and wets it down besides.

Mr. Giffin. You misunderstand. We

have been putting oil upon the very worst streets that we have in the city. If they would give us such streets to oil as you saw oiled to-day, it would not take half as much as we put upon the road in the work of this afternoon.

Mr. Morse. How much would you take for such streets as you speak of, and such as that oiled today?

Mr. Griffin. I should imagine from 100 to 120 barrels per mile. We have a few streets that I expect to go on with the work upon that will require 275 barrels, and possibly 300.

Mr. Morse. On such a road as the one of to-day, you think 125 barrels would be about the right quantity, and you would have to sprinkle it first?

Mr. Giffin. Yes; about that.

Mr. White. There would be no advantage in sprinkling a road like that with water.

Mr. Morse. How much oil would you put on?

Mr. White. I think about 100 barrels per mile.

Mr. Devine. There are a large number of macadamized streets in Sacramento, and, as has been explained to the Convention, it is a question whether macadam will absorb oil. I think it would not. How much sand would be necessary with the oil for a surface on macadamized streets? We find that we can get fine macadamizing material very cheap. We have paid 30 cents a yard in Folsom for it, and have it delivered to us for 50 cents. If we have to substitute oil and sand, put on a new surface on the macadamized road, we want to know how much a block or a mile it would cost. How much would you say, Mr. White?

Mr. White. I should say that on a hard macadamized road, 75 to 80 barrels of oil per mile would be sufficient.

Mr. Devine. And how much sand?

Mr. White. A very little sprinkling of sand; just sufficient to take up the surplus oil.

Mr. Devine. Do you think that would give us a good road?

Mr. White. That would give you a good surface. That has been our experience, and of course we can only speak from experience.

Mr. Ey. The gentleman says that on two of the worst roads they have had, they found it took from 200 to 275 barrels of oil per mile. What character of roads are they? What soil are they composed of?

The President. You mean as differing from the soil we had to-day, I presume.

Mr. Giffin. The general formation of our whole country about Santa Ana is an adobe foundation, and it is ground up by the wear and tear of driving over it, making an adobe dust, I suppose you would call it. That is the condition I found the road in when I applied the oil, and I put enough on so as to be absorbed, all it would absorb, and it would lie there two or three days in some places where there was a little more oil than in the others.

Mr. Sprague. That was a very bad way to put the oil on, was it not?

Mr. Griffin. Yes, it should have been smoothed up beforehand rolled and gotten in good shape. We just put the oil on, as I said before, out where it was so extremely dusty, and put it on roughly, and it turned out a very good surface, after all.

Mr. Ey. This adobe soil needs a good deal of oil?

Mr. Giffin. Well, yes, a dust mixed up from the adobe soil, and dust that will naturally accumulate upon the street, no matter what kind of soil it is. There are weeds growing up, and they decay and drop off, and new weeds spring up, and that is the condition of the roads that you will find at the east end of Bond Street.

Mr. Ey. I think you do not understand me perhaps. I asked you the character of the soil on the streets that you sprinkled in which you say you used from 200 to 275 barrels a mile.

Mr. Giffin. That is anything that is of a very dusty nature. I imagine that



any kind of stuff that will grind up, if you had that much dust, no matter what the character of the soil might be, would require about that amount, under those conditions.

Mayor George E. Catts, of Stockton. Mr. President, I want to ask something more with reference to the macadam streets, as we have some twenty odd miles of them in my town, and we have cement gravel beds and make our streets out of them. Those of us who have charge of city affairs know that it takes a great deal of water to keep macadamized streets from being dusty. I would like to know if a moderate application of oil to macadam streets would lessen the quantity of water that would have to be used to keep the dust down. Does anybody know who has used oil on such streets?

Mr. Giffin. We have not tried it here, but we are of opinion that it will lessen the expense to put a small application of oil on, and we are going to make the experiment in a short time.

Mr. Catts. You expect to put the oil in in about the same form as that put in on Bond Street this afternoon?

Mr. Giffin. No, not such a heavy application.

Mr. Catts. Would it be of any benefit to the street to rake it up and loosen the top of the street first?

Mr. Giffin. No. We are not going to try it that way.

Mr. Catts. You are just going to take the little dust that appears on the top of the street, and put the oil upon that?

Mr. Giffin. Yes.

Mr. Catts. With the hard foundation back of that, would that not crumble up soon?

Mr. Giffin. I think after the experiments today that very likely we will adopt the sand process, and mix just enough sand to do it well. This is the first sand I have ever seen applied to a street, and it strikes me as being the right thing.

Mr. Catts. I know it is an awfully hard proposition to keep a macadamized

street without dust. They seem to make more dust than any other character of street that we have, and it is pretty difficult to keep from watering all the time. That means a great deal of expense. So, if there is an oil proposition that will work, it will certainly be adopted with us. There will be certain objections, I presume, because people will be afraid of tracking the oil into the house, and the odor is somewhat offensive, and so on. We have a gravel in our vicinity that we consider better, or equally good, as macadam, but there is the same objection about raising dust and keeping us sprinkling all the time. Going back for a moment to the county road proposition, I would like to ask: How do you cover your bridges on the county roads? That is to say, when you are oiling a road, what do you do when you come to a bridge? Do you drive over the bare boards, or do you cover them? Within the confines of the City of Stockton there are nearly thirty bridges, and it is quite an item of expense to keep them in repair. If they are left uncovered, the lumber soon wears out, and, if covered with gravel and packed down, the lumber rots under them, and if with bitumen, it breaks up and won't stick on the boards. I have been trying during the last year to get our people to experiment with oil on those bridges, cover them with some kind of sand, stop up the cracks, and then oil them. I would like to know if anything of the kind has ever been done in this country. I have asked about it in Kern County, but I find that they do not do anything of the kind there. Has any of that work been done in your county?

Mr. Giffin. No, nothing like that has been done here.

Mr. White. We have tried a plan in our county which is working very well, and which will meet that question, I think. The road has been surfaced with gravel, and when we come to the bridge, we would give that a soaking of oil—

Mr. Catts. Right on the wood?

Mr. White. Right on the wood. We then covered the floor of it, which was of 3-inch plank, with 1-inch redwood boards, breaking joints with the planks, and then gave that a coating of oil. Then, as we graveled over the road, we ran the gravel right over the bridge just the same as over the roadbed, and after that was packed down and rolled thoroughly, we applied the oil, and continued to oil right over that surface on the bridge. That makes a very nice, smooth, continuous road, and, too, there is no wear on the plank. How long that plank will last, I don't know, but we think that, with the treatment of oil that we give it, it will last a long time.

Mr. Catts. What was the object in putting the redwood floor on?

Mr. White. Put on the redwood flooring is because the redwood lasts better than pine, and it would add to the life of the bridge to put that next to the gravel.

Mr. Sprague. It prevents the excessive evaporation which tends to break up the surfacing.

Mr. White. Then, as I say, we break joints with the planks so that none of the gravel will sift through.

Mr. Catts. How long since you made that improvement, Mr. White?

Mr. White. That was done two years ago, and the bridge is in very good condition.

Mr. Catts. It depends a good deal upon the gravel, with us. Sometimes we have to renew the flooring in three years. There are bridges that lead out to the main arteries of the town, that is, the main county roads that come into the town, where we have very heavy teaming, some of the teams bringing as high as 7 and 8 tons of wheat to the team, with three or four wagons and ten or twelve animals, and it is pretty hard on the bridges, and they wear through in ruts so that we have to reverse the lumber occasionally, whenever we can, and it is a pretty heavy tax on the town to keep those bridges

in order. The nearest we got to the solution of the question was by covering the bridge floor with gravel, but the gravel in time tends, through letting the water through, to rot the lumber underneath it. I think the oil would keep the water out from the lumber, and would tend to preserve the lumber to a certain extent, too.

Mr. Parker. I would like to ask Mr. White if the plank over which he placed this flooring was new plank of an even thickness?

Mr. White. Yes, it was.

Mr. Parker. If you had a bridge with old plank, you would remove all the old plank and put in new plank before you went on as you have specified?

Mr. White. Yes, unless you could go over it with an adz and smooth it down, and make it so that the 1-inch boards would fit down nicely.

Mr. Parker. With the unevenness, it would be impracticable to place the thin flooring that you speak of in position?

Mr. White. Yes.

Mr. Macaulay. Answering the gentleman from Stockton in regard to the covering of bridges, I desire to state that in Santa Clara County, in fact, in San Jose, we have covered two bridges with what we call the McMillan covering. It is a system of 2x8's and then 2x6's, plank, put together, and breaking joints, and that leaves a little indentation, little grooves longitudinally, the whole length of the bridge. We then put bitumen on that, and that affects the bitumen so that it does not break up. We find it splendid and very successful. We get a covering 8 inches deep, and it overcomes all the objections that you have in the way of the timber running out.

Mr. Devine. How long have you had that system in use?

Mr. Macaulay. We have had one bridge covered that way for six years.

Mr. Devine. What is the condition of it now?



Mr. Macauly. It is in as fine condition as the day it was put down. If you will communicate with the County Surveyor, Mr. McMillan, he can give you all the data about it.

Mr. W. H. Poston, of Pomona. With reference to the subject of granite roads, we have used oil upon decomposed granite, which is practically the same as macadam, and it cost us \$219 a mile for oil alone. That seems to be only good for about three months. That is, we put it on about three months ago. It takes a good deal of oil to make a good road. If you don't put the oil on, you don't get the result.

The President. Can you answer Mr. Hopper's question about the rotten rock, macadam? What about oil put upon that? Would it do them any good?

Mr. Poston. Yes, I think it would. Ours is decomposed granite, and it works fine on that. Our road is in fine shape. We have just enough dust on top to take the oil up.

The President. But you say you have to oil it every few months.

Mr. Poston. It should be oiled twice a year.

The President. And how much does it cost?

Mr. Poston. It cost us \$219 for 6000 feet, 18 feet wide.

Mr. Heathman. I want to say to Mr. White that the tendency of oil coming in contact with water is to rise. Let us suppose that there is a cement road like these specimens here, and there is this dust which has been spoken of accumulated upon the top roads, whether macadamized or not. What I want to know is: By coming in contact with the water put on with a sprinkler, or rain water, is there any sort of coalition or cementation of this dust with the structure you have already made which has a tendency to increase the stratum of oil bearing material in thickness? Have you had any experience in that direction? In other words, will these roads be getting better all the time on

account of the rain or on account of the sprinkling? Will that oil bearing stratum be getting thicker all the time?

Mr. White. Our experience is that the oiled surface, when it is properly made, of the best material, like "Exhibits 1, 2 and 3" here, does not lose anything; there is little or no wear. So when you dress it up again with oil, and add the sand, you add to the wearing surface, and, if so, gradually thicken the layer of oil and road material.

The President. I spoke of a sprinkler that the City of Los Angeles used on Bond Street. Mr. Earl, who manufactured them, has brought in a sample of the sprinkler. It is almost exactly like the water sprinkler, but he says there are differences, and, as he is present, I will ask him to explain it to us.

Mr. Earl. This lug on the water sprinkler sets down in this way, and this one is set in this style. There is  $1\frac{1}{2}$  inches in here. This illustrates the way it works. This lug comes down here  $1\frac{1}{2}$  inches, and this one the same.

The President. Why do you make a difference between the water and oil sprinklers in this regard?

Mr. Earl. Because, the oil being heavier in consistency, will not throw as far as the water. These are made to throw the oil 8 feet wide, while a water sprinkler will scarcely throw it more than 6 feet 4. This part of it here is concaved more on the inside, which has a tendency to throw the oil more out. That is the only difference between the oil and water sprinklers.

Mr. Macauly. When the oil gets down pretty low in the tank, how is the flow as compared with what it is when it is full?

Mr. Earl. It will sprinkle down to half a barrel, and throw nicely.

Mr. Macauly. Then from there down what do you do?

Mr. Earl. When it gets down to the last half barrel, shut it off, and go and fill up again.

The President. We have two gentlemen with us today who have had

considerable experience in this matter of road making, as I understand, Mr. Albert K. Smiley and Mr. H. A. Smiley. I would like very much to hear from them.

Mr. Albert K. Smiley, of Redlands. I desire to say, gentlemen, that we have had no experience at all in oiling roads, except what we have seen others do. We have built a great many roads—I have 45 miles of road on my own estate. I would like to ask a question, however, and that is, in regard to the quantity of sand used. We propose to have our streets oiled this winter, especially those where we have been having trouble with dust. The surface is adobe in most places. It is a smooth surface, except occasional little depressions. We want to oil it, and we will have to cover it with sand, I presume. How many tons of sand per mile are required in oiling it?

Mr. White. I cannot answer that question in tons, Mr. President. The rule we adopt when we put the oil on the surface is to allow it to remain there an hour in the heat of the day before we put the sand on, as considerable of it will soak into the roadbed in that way, and much of it will sort of dry on top. When it soaks in in that way, it requires a very light sprinkling of sand. But when, as on a tight macadam, there is no appreciable penetration, it requires considerably more sand. So that is a question that cannot be answered off hand, for each road would require a different quantity from any other road, probably. But with a machine for putting it on in an even layer of any thickness required, the expense is very little; the hauling would be the principal item. As to how much it will take by way of a general rule, that is something I cannot answer.

Mr. Smiley. Do you know how much you have ever used on any given mile?

Mr. White. No. I never kept an account of that. But you saw out there this afternoon that one load went about half way across that block with the oil.

The President. Mr. Smiley, in your observation of this oil question, have you concluded that it is a good thing?

Mr. Smiley. I am under the impression that it is going to revolutionize road making. That is certainly true in Southern California, and I think it will all over the United States. (Applause.) Of course, we all know that road making is gaining the attention of people all over the country, as it ought to, and the country has wakened up to it. And, so far as my observation goes (and I have watched it carefully in Redlands), I believe the oiling of the streets is of wonderful benefit. I do not think we have fully mastered it as yet, but I venture the prediction that in ten years from now, all the roads in this section of the country much used will be oiled, and that the oiled roads will be serviceable all the year round. I supposed that there would be a great deal of offensive odor, and that we would track our houses up with the oil. But that is all moonshine; it is nothing of the kind. If the oil is properly applied to the surface, it seems to make a good, solid, smooth roadbed, and, with the cheapness of oil nowadays, I feel certain that it will become the fashion. A question was asked our Superintendent of Roads this morning which was not answered quite to my satisfaction, in regard to the cheapness of the sprinkling of roads, one way and the other. I think the sprinkling of roads with water costs nearly four times as much as oiling, and it is not nearly so good, because when it is sprinkled, it makes mud, and the wheels of carriages are soiled by it, it is not absorbed in the first place; whereas a well oiled road is a smooth road, dustless, and much better than a sprinkled road. I believe that the oiling process will work on macadamized roads as well by putting on a little sand on top of it, and I think the same will be true of gravel or hard adobe.

The President. Then you think it would do in San Leandro with their rotten rock?



Mr. Smiley. I certainly think it would.

The President. We would like to hear Mr. H. A. Smiley's view upon the matter.

Mr. H. A. Smiley, of Redlands. I could only repeat what has been said by Mr. Albert Smiley, Mr. President. The only thing I want to say in addition to what has been said is that in the summer time a white dust is offensive to the eye, and when the streets are oiled they become a dark color, which is very much more agreeable and better for the eye. I believe that point has not been mentioned. That is quite an important point, as it seems to me, in a country where the sun shines with such fervor upon the streets as it does here.

Mayor J. J. Hanford, of San Bernardino. Gentlemen of the Convention: I have a resolution here that I desire to offer. It is one that I have been asked to offer, and is not offered particularly in my own behalf. It relates to scientific experiments. It reads as follows:

"RESOLVED: That the councilmen of Los Angeles, the councilmen of San Jose, and of all other cities that may have the opportunity to do so, be and they are hereby requested to institute and carry out during the year next ensuing, a series of scientific experiments, with a view to obtaining exact, reliable, and complete data as to the advantages, cost, and methods of applying oil to country roads, and suburban and city streets, and that the Engineering Committee of this League be and they are hereby instructed to further such experiments, make record of the same, and report thereon to the next annual convention."

After some debate by the Convention, the resolution was unanimously adopted.

Mr. J. L. Wright, of Santa Cruz. Mr. President, the discussion of the oil question has introduced another matter that certainly is important to all sections of the State of California, the question of bridges. Santa Cruz has had some bridges that have had to be used for

traffic, and I desire to state the result of the experiments made there, within the last few years. We have not had occasion to use oil, but we have found that by double planking our bridges, the expense of keeping them up is reduced more than one-half. That does away with a great deal of the objection that Mayor Catts of Stockton suggested. The first flooring of plank is invariably of redwood, laid diagonally across the stringers, and the other is laid at right angles with the bridge, and by that means they cannot wear out the plank until it wears in two entirely, and then they frequently cut it in two and change ends, and it stiffens the bridges, and of course it gives very much better satisfaction.

Mr. Macaulay. Our experience is about the same as that of Santa Cruz. The expense of covering a bridge with 4x4 pine—you use that for covering, do you not, Oregon pine?

Mr. Wright. We use 3x8's.

Mr. Macaulay. Our experience is that it costs about \$300 or \$400 to recover an ordinary sized bridge with this bitumen covering, which makes it a little more expensive in the first place, but it is much cheaper in the long run.

On motion of Mr. Ed. Tedford, of Santa Ana, seconded by Mayor Ey of the same place, a cordial vote of thanks was unanimously extended to Supervisor T. F. White, of Chino, for his valuable paper and other services in the matter of sprinkling streets with oil.

On motion of Secretary Mason, seconded by Mayor Ey, a similar vote of thanks was tendered to Mr. Giffin for his kindness and courtesy in the same connection.

On motion of Mr. W. L. Peters, of Riverside, seconded by Mayor Ey of Santa Ana, the question of the legality of the patent of the dustless Road Company, and the likelihood of that company succeeding in collecting a royalty from any town sprinkling its streets with oil in the event of suit, was referred to the Judiciary Committee of the

League for report, with the request that the Committee have its report published in "California Municipalities" at the earliest possible moment.

### Some Scattering Remarks.

Mr. Devine. I would like to inquire of those towns and cities that use water for sprinkling, what system of sprinkling they employ in the summer time; whether they own the sprinklers themselves, or let it out by contract, or do it by day's work, or how they do it. I observed today in Los Angeles a sprinkler with several business houses advertised on it. Sacramento does not believe in anything of that kind. We have twenty five sprinklers, all owned by the city, and we perhaps use \$4000 or \$5000 in wages of day laborers in that direction, while the balance of the money expended is paid to those where it is let by contract, giving the contractor the sprinkler and letting him supply the driver and horses. All together we spend about \$16,000 per annum in sprinkling.

The Secretary. I have not the figures here, but about one year ago I sent out inquiries to the principal cities of the State for the purpose of getting data upon that very point, as to whether they owned their own sprinklers, and the cost for repair of their wagons, how much they spent for water, how much for salaries, and whether they let the contract as a whole, and various such details in reference to the matter. The data received in reply covered the cities of Los Angeles, Pasadena, Riverside, Stockton, Fresno, Oakland, San Jose, and two or three other towns—about ten or twelve of the largest towns of the State all together. If you will look back to the numbers of "California Municipalities" of about a year ago, you will find all of the information there published.

Mr. Kirkbride. With reference to these scientific experiments in the oiling of streets, it may be of interest to find out how we are to make those

experiments. I have been endeavoring, while here and out on the street this afternoon, to put queries to those people who know something about it with reference to that matter. I understand, in that connection, that the apparatus which we saw working this afternoon can be purchased, that a patent has been applied for for it, and that it will cost in the neighborhood of \$100—that is, the sprinkling apparatus on the rear of the tank wagon, and that apparatus can probably be fastened by any local machinist to an ordinary tank wagon. This other apparatus that we have on the table, was explained to me by a gentleman around at the machine shop, where Mr. Giffin took me, I understand costs, just simply the casting, in the neighborhood of \$90. It presumably can be attached by the local machinist to a water tank. By getting one of these, and attaching it to the tank wagon, experiments can be made. Moreover, if anybody learns or knows of anybody else who has appliances of this kind, I think it would be advisable for him to forward that information to our Secretary, in order that we may also get hold of it. For myself, I represent a town where I would like to see these experiments begun, but we do not know how to begin. I am sure, however, that we have gotten some of the information that we need, and I hope that many will start in upon the experiments, and that as soon as possible.

Mr. M. Walsh, of Petaluma. As this question about watering streets has come up, I desire to state to the Convention that Petaluma has two water carts, one of which is the common type, while the other is operated by the vacuum system. The latter was invented by a man in Petaluma, and we found afterwards, when water was quite scarce, that it was a very useful thing. We dug wells and used the water from those wells by this vacuum system, water that we could not by any possibility use otherwise. It seems to me



that if the vacuum system were used in connection with the oiling of streets, that it would probably be very useful, too. That wagon has saved Petaluma probably \$150 to \$200 a year, because we now take salt water direct from the creek and sprinkle the streets with it, not using the other wagon at all, because we have to pay for that water.

Mr. Morse. What does it cost you per mile of street sprinkled?

Mr. Walsh. It does not cost us anything except the labor. It costs \$4 a day for a man and team.

Mr. Morse. How many miles do you sprinkle during the year?

Mr. Walsh. He sprinkles about thirty loads of 630 gallons each a day.

Mr. Morse. Mr. Chairman, perhaps I can give the Convention a pointer upon that subject. As to the question asked by Mr. Devine, it makes a great deal of difference what method is used in loading the watering cart. In our city we use and have used for this past past year eight 750-gallon tank wagons. Under one system, where we have pressure to deliver it, one team delivers sixty 750-gallon loads upon the street a day. Where we did not have such pressure, they could not deliver much more than half as much. With our eight wagons, we sprinkle 56 miles of street during the year. During the past year, we have spent in our Sprinkling Department, in the purchase of two wagons, \$950, and about \$6000 for sprinkling the 56 miles.

The Secretary. Santa Clara has three sprinkling wagons, and the average number of loads per day is about the same as in Riverside, between 50 and 60, and we sprinkle 30 miles a day with three wagons. This is done at a cost of \$70 a month for team and driver, without reference to hours at all. They commence about 6 o'clock in the morning, and work until 6 or 7 o'clock in the evening, and on Saturday nights until 8 or 9 o'clock, with the result that I think we cover more ground at less cost than any other town in the State. The

cost per year is something like \$1500.

Mr. Morse. How much pressure have you?

The Secretary. We have 40 or 50 pounds. We take directly from the fire hydrants.

Mr. Morse. All your sprinkling is from the same pressure?

The Secretary. Yes. Our water costs us practically nothing. Just about what it costs to pump it, or 2 cents a thousand and gallons.

Mr. Snyder. As our friend from Sacramento referred to the advertisements on the sprinkling carts in Los Angeles, I feel it is only just to say a word in that connection. In the first place, we are great advertisers down here. So far as the sprinkling carts are concerned, that is something over which the city itself has no control whatever. We make a contract with the lowest bidder for the sprinkling of all the paved streets in Los Angeles for a certain price. We expend approximately \$50,000 annually. In addition to that, we hire a street sprinkling inspector to whom we pay \$85 a month. But with all that, our streets are very poorly sprinkled. I do not approve of the system, however; I do not think it is a good one.

The President. What is the matter with it?

Mr. Snyder. I believe the city ought to sprinkle its own streets. It should own its own carts and do its own work. I believe it could be done cheaper and better under proper management. With the contractor, when he bids he takes into consideration that there may be three months of rain during the year. He bids so low in order to get the contract that, if it does not rain during those three months, he has got to steal, as it were, from the city, in order to come out even; in other words, the streets are not sprinkled.

Mr. Devine. Do you let the contract for a whole year?

Mr. Snyder. Yes, for three years.

Mr. Devine. We are not allowed to let a contract for more than one year.

Mr. Snyder. The system is a very poor one, as I said before, and I would not recommend it to any other city. The same thing is true in regard to collecting the garbage: I believe every city should collect its garbage. There are complaints coming into my office almost daily about streets not being sprinkled and about the garbage not being gathered, and yet I am powerless to do anything. The city is under contract, bound up for a certain period of time; the contractor in each case has given his bond, and if he does not perform the work, what are we to do?

Mr. Devine. Cancel his contract.

Mr. Snyder. You know that when two men enter into a contract, one cannot step out and cancel by a word. It takes a judge, too, and while you are doing that, fighting the matter out in the courts, the contract expires.

The President. In Palo Alto we own the tank, own the water cart, and we pay a man so much a load for watering the streets. That system has its advantages, but I have heard of cases where, when he thought it was going to rain, he got up at 2 o'clock in the morning and watered the streets before the rain came off.

### Street Lighting by Meter.

BY T. D. ALLIN, CITY ENGINEER OF PASADENA.

[A PART OF THE PROCEEDINGS OF FRIDAY, JAN. 10.]

In offering this short paper on Street Lighting by meter we do not attempt to prove that street lights should be metered nor do we claim that paying for street lights by the number of street lights in service, is all wrong. Our only desire is to bring the suggestion before you that the proposition may be carefully considered by those buying electrical energy for street lighting.

The writer has had considerable experience with water meters and fully believes that the only fair and equitable way to buy or sell water is by the

meter. If the fair and equitable way to buy and sell water is by the meter then why not extend the system to all electrical energy bought or sold? House lighting is by meter, electrical energy for pumping and manufacturing plants is by meter, then why not apply the meter to street lighting? Surely it is not on account of the expense of meters, as a meter necessary for a circuit of arc lights, would cost but about \$35.00.

In the city of Los Angeles I am told there are 17 circuits which would require 17 meters at a cost of about \$600. This is no more than the cost of 100 water meters for house use, and is no more than about 15 of the cost of a single water meter large enough to measure the water passing through one of the large water mains furnishing water to the city of Los Angeles. Therefore I state that the element of expense does not enter into the proposition.

The town of South Pasadena pays for its street lights by meter. They have 160 16 candle power incandescent lights, consisting of four circuits of 40 lights each, all measured by one meter placed in a building built for the purpose near the southern limits of the town.

They pay 7c per 1000 watts with a minimum rate of \$60.00 per month. They have a midnight moonlight schedule. The system has been in operation about ten months. For two or three months the rate has been the minimum, while the highest rate has been \$87.00, the average being about \$70 per month. Each month representatives of the town and of the lighting company read the meter and the bill is made against the town accordingly. The method has been very satisfactory to the town and so far as I know it has been equally satisfactory to the lighting company.

There may be other towns or cities in California paying for street lighting by meter, if so I am not aware of the fact.

To my knowledge the only city of size in the United States paying for street lighting by meters is Utica, New



York, which has a population of 56,000.

Then I am told they are greatly pleased with method and the results and believe it to be the only way to pay for street lighting.

The meter would cause lighting companies to take greater care of their lights, to keep them in order and see that all lights burned the full time specified.

On the other hand they might be inclined to have their lights on a greater length of time than specified and might not take the same care to prevent leakage that they would under the pay per light system. These things would have to be regulated upon a just basis. Occasional tests of energy required for single lamps or certain circuits would catch abnormal and certain leakage.

As for rating by meter, at present there is not as much reliable data to guide the municipal official in establishing meter rates as are to be found for the usual method of paying by lights of given candle power.

Yet data would soon accumulate and the municipal official would soon learn to deal with quantities and would not rely entirely upon lights, hour and candle power, which really are only factors, producing quantities upon which rate is based.

The elements entering into the proposition of paying a lighting company no more than a reasonable return upon capital actually and judicially invested, after having carefully taken into consideration all of the special conditions peculiar to each locality, such as cost of fuel, proximity to water power, the burden of taxation, the period and density of distribution &c., besides bearing in mind the necessity of allowing a much greater per cent for depreciation in value of an electric lighting plant than is allowed for other plants furnishing public utilities, owing to the many and frequent inventions and new appliances, causing the old and expensive appliances to be discarded as obsolete long before they are worn out. All of these

puzzling facts and conditions, which confuse and mistify the ordinary layman as well as annoy the expert, enter into the proposition of street lighting by meter, no more than do they into the present lamp basis.

But few taxpayers really know how many electric lights are maintained in his town or city and unless an expert, and experts are few, he cannot judge the actual candle power furnished to the various lights; therefore he is in a state of uncertainty as to whether or not his town or city is getting all the light it should get under its contract, while on the other hand lighting by meter appeals to the public as being just and equitable to all concerned.

If feasible why not adopt it? If not feasible why is it not?

Mr. Lynch. I would like to ask the gentleman what he pays per thousand watts?

Mr. Allin. .7 cents, with a minimum rating of 75 cents per month. I will state the South Pasadena is a small municipality, of about a thousand inhabitants, and at present about 150 or 160 lamps. We expect to put on one or two additional circuits very soon.

Mr. Lynch. Your lights are incandescent, are they not?

Mr. Allin. Altogether.

Mr. Lynch. Will the meter system apply to arc lights also? I was going to say, Mr. President, that that is one of the chief difficulties that we have to contend with in our town, the lighting system. Some three and a half or four years ago, the city entered into a contract for the furnishing of lights to the city for five years, at the rate of \$9 a light under a moonlight schedule. We have considerable difficulty at times with lights, and the Chief of Police now instructs his patrolmen to report every light that does not burn. We find that is not exactly a fair proposition to the electric light people, and sometimes it is not fair to the city, as in case, for instance, that these men do not get all the lights not burning, to report them. This

matter of metering the street lights appeals to me very strongly. It seems to me the very best solution of the problem.

The Secretary. If there are no further questions to be asked of Mr. Allin, we have an expert electrical engineer here who has given some thought to this very proposition, and, if there is no objection, I will call upon him to address us. I refer to Mr. Tracy.

Mr. Tracy. Mr. President, Mr. Mason was erred in calling me an electrician, but I do a good deal of the steam engineering part of the matter. I was very much interested in the paper just read. Going up and down the coast, I see the different methods of street lighting, incandescents, arc lighting, tall masts, and all that sort of thing, and I have noted that very often the lights are out. Whether it is reported or not, the company furnishing the electricity is saving by it and the city is losing. It is a certainty that the city never gets any more than it pays for. There are so many lights in the system, and there are no more burning than are wired. So it seems to me that if anybody suffers by a lack of current, it is the city. If there is any way to stop that leakage and find it out, I think it ought to be adopted. Personally, I cannot tell you about the value of meters. I know that water meters must be calibrated, and that it should be done every year. I have personally taken a meter and run water through it, and have found that it was no more reliable than a man would be in guessing about it, and I suppose the same thing might be true about electricity. In fact, I have some electrical friends who tell me that that can be so, and that it often is so. But we do not want to be pessimistic about these things, because in electricity they are improving all the time, just as some engineers are improving their line of machinery, and it seems to me that the time must soon come when they will measure it to a stated, just amount of electricity, and it will be measured just

as they now measure power. I think that is about all I can tell you upon the subject.

The Secretary. Is it not a practical proposition, then, to meter a given circuit?

Mr. Tracy. It certainly is. I would advocate in city as many circuits as practicable, for the reason that it makes better distribution in the stations, and one circuit can be out and all the rest of them burning. At the same time, it would not take any more dollars and cents, as I understand it, or very little more, to furnish the meters. In such a case each circuit would record the amount of electricity used. I would like to see that done.

Mr. Snyder. Do you not think the best way around all this trouble is for the municipality to own its own lighting plant.

Mr. Tracy. I most certainly do, yes. It does not make any difference, gentlemen, where the energy comes from, but I do think that a city ought to own its water, its own lights, and I would like to see the cities own their own railroads. On the lighting question, I would like to see 32-candle power incandescent lights put in in the small towns, as I think it is the best system I have seen.

The President. Instead of arc lights, you mean?

Mr. Tracy. Yes. I see so many towns where you cannot drive a horse through the streets at night without blinding him, where arc lights are used. I am not the only one to make that complaint, either. I think with the 32-candle power incandescent lamps, the effect is very much better.

Mr. Hanford. You can have more of them for the same price.

Mr. Tracy. Yes. There is more power used up in producing the incandescent light, perhaps, but you get a great deal better conditions.

Mr. Macaulay. If they are better for a small town, why not use them in a large city?

Mr. Tracy. I think they would be



advantageous in a large city. But in the cities it is to be remembered that there is such a vast amount of commercial lighting that it is not really necessary.

Mr. Macaulay. The business portion, yes, but the residence portion.

Mr. Tracy. As to the residence portions, I think the same remarks would apply as in the case of the small town. I presume there are many gentlemen right here who will agree with me there.

Mr. Turner. I agree with you for one. We have the business portion of our town, even, lighted in that way.

Mr. Tracy. Take towns where there are a great number of shade trees, and where they place the arc lights on the corners of the streets. There are dense shadows under the trees in such cases, so that you cannot see anything. Then again, take it in places where the light shines in your eyes, you will be fairly blinded with the arc light, while with the incandescent system, I have noticed that the streets are well lighted.

Mr. Kirkbride. In the case of paying by meter, suppose the leaves of the trees touch the wires. Do they not carry off a certain amount of current which you would have to pay for under the meter system?

Mr. Tracy. Yes. I suppose that any leakage would have to be paid for, just the same as it always has been with the gas and water.

Mr. Hanford. The city would not have to pay any more, if it was measured after the leak. The only difference would be that there would be less light.

Mr. Tracy. The moral of that would be, be careful where you place your meters.

Mr. Snyder. Do I understand that a portion of the current is carried away by a leaf touching the wire, where the wire is covered?

Mr. Tracy. No, but there is a certain amount of leakage and line loss. If the meter is placed at the station, and you pay by that meter, running the lines

along your streets, if you have poor insulation, poor line, for instance, where they pass through the trees and rub against them, there will be a leakage, and the meter would register, of course, every watt that went through it, and so you would pay for the leakage.

Mr. Parker. If there is a lamp out on the circuit, does that reduce the amount of current passing through the meter?

Mr. Tracy. It does.

Mr. Parker. There are other forms of leakage than contact with trees, from my observation. I have observed the small boy, having discovered that a certain pole in town that was bound with wire to keep the horses from eating it down, found that by applying their hands in certain localities would get a good, lively shock, and of course they enjoy initiating anybody they can get hold of.

Mr. Tracy. I should say that if the leakage was very great in such a case, they would not do that very much.

Mr. Morse. As to the price paid for current, Mr. Allin speaks of their rate as being 7 cents per kilowatt, which I presume is ordinarily considered a reasonable price, according to the rates charged for electrical energy. But that is not a cheap price; if you pay the company for what the meter shows, 7 cents per kilowatt, or thousand watts, that is a good, big price. However, I think the principle of metering is the true one, and the only plan to adopt, under the circumstances.

Mr. Hanford. I wish, Mr. Morse, that you could make the man we have to deal with believe that.

Mr. Morse. The parties you are dealing with cannot be made to believe anything that they do not want to. I understand that in San Francisco, for instance, they pay at the rate of 3¾ cents per kilowatt hour.

Mr. Turner. Will some one explain in relative terms just what a watt is?

Mr. Hanford. It is the 1-746th part of one-horse power. That is to say,

there are 746 watts to a horse power, and a kilowatt is a thousand watts, or about a horse power and a third.

Mr. Morse. Take Massachusetts, for instance, and in some towns they pay 4 cents, and in some  $3\frac{1}{4}$ . In our city we have been crediting ourselves 2.2 cents. If you can get it down to that price, you are down to the bottom. We own our plant, of course.

Mr. Turner. In Merced we have 6 arc lights and 88 incandescent lights, with a population of 2000. Our incandescent lights are right in the center of the street at each corner, and we are very well satisfied with the system. Our arc lights manage to go out about 4 o'clock in the morning. Our lighting is continuous, no moonlight schedule. And so I say I am in favor of doing away with the arc lights and putting in more incandescents, and putting them right in the middle of the streets, in which event you are not troubled with the trees. In putting them on one side of the street along the shade trees, you would be in the shade on that side, and on the other side you could not see. We pay \$1.10 per month for the incandescent lights, and \$9.45 for the arc lights, and yet they say they are losing money in supplying it at that price.

Mr. Wright. Perhaps I can afford some little information to some of the delegates in regard to the prices for the furnishing of electrical energy. Not very long since, in fact, I believe just after the last as after every municipal election, the two electrical powers in the City of Santa Cruz endeavored to get the city to dispense with their own system, and they use every pull that they possibly can to be permitted to furnish the energy for pumping sewage and lighting the street lights. In order that we might be in a position to know something about what their proposition was. We asked for bids from San Francisco from the various electrical supply departments there, and we had as low figures as  $2\frac{1}{2}$  cents per kilowatt for furnishing as much power as we

might need. We find also that the only way to light the city economically is to own the plant. Our lights cost us \$4 per light per month. We have not, however, sufficient machinery to light all the lamps that we need, as at present we have but 84 arc lights, and some of the outlying districts need more. We asked for bids for current furnished through the meter to supply some of this want, we to furnish the lamps and wiring, and the lowest bid that we got was \$3.80.

### Two Constitutional Amendments.

[A PART OF THE PROCEEDINGS OF FRIDAY, JAN. 10]

The President. The next subject to take our attention is that of Constitutional Amendments. Senator E. K. Taylor, of Alameda, was to have had a paper entitled "Two Constitutional Amendments," but, being absent, our Secretary, Mr. Mason, will speak to you upon the subject, as he is very familiar with it.

The Secretary. The importance of this subject would justify a great deal of time being spent upon it, but I will endeavor to briefly explain it, so that those members of the League who are not already thoroughly acquainted with the question may get an idea as to what these two amendments mean. One of them was considered by the League at its last annual convention, viz, the proposition to exempt from taxation the bonds of city, county, and state. I think we understand that very well. Taxation of public bonds cannot benefit the municipality at all, and does not benefit the citizens of the municipality, but, on the contrary, it adds to the burden of the city and of its citizens by increasing the rate of interest. Two years ago a similar amendment was submitted to the people, and was defeated by a small majority. We think that by having it resubmitted at the next election, and by conducting a campaign of education in favor of it, we will be able to



secure its adoption, thereby lessening the burdens of city and citizen. There is, however, another constitutional amendment to be voted upon at our election next fall that I consider very pernicious in its effects upon municipal government and upon the cities of the state, and I think we ought to bend every energy to defeat the amendment overwhelmingly. There was passed by the last legislature an amendment known as "Assembly Constitutional Amendment No. 28." I have sufficient information on the subject to state that that was submitted at the request of the associated corporations of the State, for the purpose of securing them in the exercise of the privileges which they now possess to an extent not heretofore enjoyed by them. Under the present system, the municipalities of the State, through their city officials, have the right to fix water rates, gas rates and possibly electric rates. The Railroad Commission establishes railroad charges, and we have Insurance Commissioners for insurance matters, and so on. By this amendment, it is proposed to take away from the cities, the counties, and the State Railroad Commission, the State Insurance Commission, the State Banking Commission, all of their functions, and to center all such power in a new commission, to be composed of five members, to hold office during ten years, one to be elected every two years, from districts in the State, and the first commission to be appointed by the Governor; and that their duties shall consist in regulating the prices of everything of a public nature, including water, gas, electric light, power, telephone companies, telegraph companies, sleeping-car companies, express companies, and railroad companies, and the services and commodities and impose regulations concerning same. The proposed amendment also repeals the present constitutional provision relative to that matter. As to the policy of appointing a State commission, or having it under the present system, I do not care to speak just

at present. But there is a joker in this amendment, which I think has been covered up to a considerable extent, and which I wish to expose. We understand that the matter of regulating rates as now done is not altogether satisfactory. The Boards of City Trustees and County Supervisors are practically powerless to regulate rates to any great extent. We have to accept the statements made by the corporations, and virtually submit to their dictation. That would probably be true when it came to the fixing of rates by State regulation. There are in California 116 municipalities and 55 counties, and every one of them has a public or private water company. The magnitude of the work of attempting to fix those rates is beyond any commission, so that there would practically be no regulation whatever. That is probably one of the purposes that these corporations aimed at. But the joker that I speak of is contained in this language: "And from and after said appointment"—that is, of the State commission—"the State Commission shall in every respect, so far as relates to all and every the said rates and charges hereinbefore mentioned, and to all and every the matters and things, howsoever, *connected with performing said services and furnishing and supplying said commodities*, be the successor under the constitution and laws of the State of the Board of Supervisors and City and County or City or Town Councils and other governing body or bodies of the several counties, cities and counties, cities and towns of the State, with the same powers, authority, and duties now established by the constitution and laws of the State, or hereafter to be established by the legislature, except where the latter may conflict with this section." That means that this commission will have the supplying of the water, the electric light, and any other commodities and services that are now furnished by the municipalities. In other words, it would take away from the City of Los Angeles, and the

City of Riverside, and the City of Santa Cruz, and all of our towns and cities that now have their own water works, the right to operate and perform and furnish those commodities and those services, and vest them in this State commission, which is appointed by the Governor for ten years, and it would practically rob the municipalities of the property which they have paid for and which they have accumulated.

The President. Do you know who drew that constitutional amendment.

The Secretary. I have my suspicions, but I have no knowledge.

The President. What is your suspicion?

The Secretary. That it was drawn by a railroad attorney.

The President. What is his name?

The Secretary. It is merely a suspicion, and I do not think I ought to state the name.

Mr. Snyder. Whoever drew it, it is certainly bad.

The Secretary. I am only familiar enough with the style of writing of one or two individuals so that I rather think I know who wrote it.

The President. Who introduced it?

The Secretary. It was introduced by Assemblyman Laird, by request. Mr. Laird was an Assemblyman from Kern County. We all know very well that the most potent factor in the establishment of rates or the securing of reasonable rates from private companies to the people of the cities and counties in California is the very fact that the municipalities may, in case they so desire, establish their own works and furnish the people themselves directly. The very possession of that power by the municipalities is the most potent thing to keep down to a reasonable amount the rates charged. Take away from the municipalities their right to establish these things, and there is absolutely no restriction upon the power of the corporations to charge whatever they please. Therefore I say that it behooves the people of this State, the

municipalities of the State, and the officials here represented, to spread a knowledge of the iniquities of this constitutional amendment, and to do all in their power to defeat it. And in that connection I have a resolution that I wish to introduce, instructing our Executive Committee to conduct a campaign of education from now until next election day, for the purpose of informing the voters in regard to these two amendments. It reads as follows:

"Resolved, by the League of California Municipalities: That the Executive Committee of this League be directed to institute and conduct a campaign of education, having in view the enlightenment of the voters of the State of California, on the subject of Senate Constitutional Amendment No. 3 and Assembly Constitutional Amendment No. 28;

That it is the sense of this Convention that Senate Constitutional Amendment No. 3 should be adopted, and that Assembly Constitutional Amendment No. 28 should be defeated.

That to secure this result, said Executive Committee be requested to co-operate with the Committee of the Board of Supervisors of the City and County of San Francisco, and other similar committees appointed by municipalities or other bodies, to secure this result."

I move the adoption of this resolution.

Mr. Snyder. I desire to second that motion. In doing so, I want to say that I think that is one of the most important propositions that the people of the State of California have been confronted with for many years. I have looked into Assembly Constitutional Amendment No. 28, and I want to tell you gentlemen that if that thing should succeed, if it should carry by the votes of the people of the State of California, it would be the greatest outrage that has ever been perpetrated upon a people. It absolutely deprives the municipality of the rights which they



have now, and sets up a commission that has almost the power of an emperor. So I do hope that every man here will remember that that Constitutional Amendment No. 28 *must* be defeated, and bend every energy towards securing its defeat.

The President. We have with us Mr. Melick, Assemblyman from Pasadena. Can you tell us something about the history of this bill, Mr. Melick?

Assemblyman Melick, of Pasadena. The first that I knew of that amendment, after I learned that it had been introduced, but when I had not realized the purport of it, was when Judge Laird of Kern County got up to speak in behalf of it. It had been brought up out of order, so that we were not anticipating it, and it had been before the Judiciary Committee instead of before the Constitutional Amendments Committee, and, not being a lawyer, I was not on that committee, and had not understood the purport of it. As Judge Laird began to speak, I went across the aisle to where Assemblyman Grove Johnson, formerly Congressman Johnson, of Sacramento, was, and he was well known as a very capable and able man and an attorney of the corporations, and I said, "Johnson, what in the world does this mean?" He said, "For goodness sake, keep still. This is one of the best jokes of the session. It is a corporation measure introduced by a Democrat, who is pushing it through. Let it go out to the people as a Democratic measure, if they want to have it. Now don't you say a word"—Laird being a Democrat.

The President. And you didn't say anything?

Mr. Melick. I didn't know enough about it to say anything. I can say this, however; I didn't vote for it. But it went through the Assembly in that way, without any further discussion. Grove Johnson went around, and he got them to keep still. Laird made a strong speech in behalf of it, and then, as it went through the Assembly, when it came up in the Senate it jumped up

in the same way. I remember Senator Rowell saying in the Senate. "This is one of the greatest outrages that ever was, one of the things that will do the worst damage to this Republican legislature that can possibly be, this Assembly Constitutional Amendment No. 28 which passed through the Senate today." And he moved for a re-consideration, but he could not get it, and I heard him say, "It seems to me that the corporation representatives from all sides have got in behind that thing, and there is no stopping it—from all sides and from the rear have they come, and it really seems to me one of the worst things we ever had in the State, and certainly the worst one in this legislature." "The only hope," he said, "is that it is going before the people. When they understand what it really is, they will vote it down. If it had been a law instead of a constitutional amendment, the damage would be something appalling." Of course, a campaign of education is before us. The resolution that you have is in order. But it will take good and vigorous work along all the line, with the assistance of the newspapers throughout the State, so that the people will understand that it is something dangerous, to defeat it.

Mr. Snyder. If it were in order to appoint a committee to watch the legislature, I would be in favor of it. When I hear that a measure has been introduced by a man in the legislature, and the men who are sent there to represent the people of our State make a joke of a measure of this kind, in order to load it upon another party, sitting and not attempting to stop it, I say it is time to investigate the legislature.

Mr. Wright. The question, is how are we going to educate the newspapers upon this proposition? They generally belong to the corporations.

The resolution was unanimously passed.

Mr. Hanford. Let me ask Mr. Mason a question. In reading the report, you

spoke about the power of Boards of Trustees and common Councils in fixing rates, and said that there was no doubt about their having the power to fix gas and water rates, but you added "and possibly electric lights." The reason I ask this question is the fact that we are facing that proposition now. For the last six or seven months we have been investigating this matter and talking of it, with a view of establishing rates for electric lights, and we passed an ordinance that on or before the first of March we will establish rates for electric lighting in our city, and at the last meeting of the Board, last Tuesday night, I had a resolution put through, inviting the proprietor of the gas and electric light works to be present at our next meeting to begin the investigation. I do not expect he is going to appear, because he never has paid any attention to us at all, but I wanted to show him that we were going to give him a fair and square show, and if he fails to take advantage of it, it is not our fault. I want to know now if there is any doubt at all about our right to go ahead and fix rates for electric lighting? Even this gentleman's own counsel told him there was no doubt about the power of the Board of Trustees to establish rates. I have understood that we are the first Board in this State to deal with that question. Can you explain to me why you used the word "possibly" in connection with electric lighting?

The Secretary. Simply because there is no case on record where it has been done, and I do not know that there has been any formal adjudication of the proposition. I am rather inclined to think that you have the power to do it, however.

The President. We have taken the power into our own hands in Palo Alto, and it has not been challenged at all.

Mr. Hanford. Is it a settled fact that we have power, because I want to include gas, too, but our City Attorney will not let me, and says we cannot regulate the price of gas.

The President. I think that question had better be referred to the Judiciary Committee, to report to you as soon as possible.

Mr. Melick. Just a word on the question of personal privilege, since something has been said here about my not opposing the constitutional amendment more violently. The proposition is this: Suppose our friend Mason had read that amendment here and taken it up for the first time, and it was the first time you had a chance to hear it at all. Would you get up and talk against it if you didn't know anything about it at all? That was about the situation with me.

At this point a recess was taken until 1:30 o'clock P. M.

The election of officers for the ensuing year was then proceeded with, with the result that the following officers and committees were elected:

President, Mayor M. P. Snyder, of Los Angeles.

First Vice President, Mayor J. P. Parker, of Santa Cruz.

Second Vice President, Mayor W. H. Turner, of Merced.

Secretary, H. A. Mason, of Santa Clara.

Treasurer, The Crocker-Woolworth National Bank, of S. F.

#### JUDICIARY COMMITTEE.

C. N. Kirkbride, of San Mateo.

Robert G. Loucks, of Pomona.

W. F. Heathman, of Santa Ana.

H. L. Partridge, of San Jose.

Raleigh Barcar, of Vacaville.

#### ENGINEERING COMMITTEE.

H. F. Stafford, of Los Angeles.

M. L. Lum, of Redlands.

H. Henderson, of Merced.

J. L. Moyer, of Santa Barbara.

T. D. Allin, of Pasadena.

#### LEGISLATIVE COMMITTEE:

John C. Ing, of Sacramento.

Carl R. Briggs, of Redding.

E. E. Bolton, of Hollister.

W. L. Peters, of Riverside.



R. J. Boyer, of Oakland.

EXECUTIVE COMMITTEE:

The President,

The Secretary,

Joseph Hutchinson, of Palo Alto.

George E. Catts, of Stockton.

Eugene E. Schmitz, of San Francisco.

President-elect Snyder then took the chair.

The question on the place for the next annual convention was then discussed, nominations made, with the result that San Jose was selected (by a vote of 18 to 7 over Santa Cruz).

Mr. Macaulay. In behalf of San Jose, Mr. President, I desire to thank the Convention for making it the next place of meeting of the League, and I can assure you all that you will be well treated and given a good time.

Mr. Brock. I move, Mr. President, that a vote of thanks of this Convention be extended to our retiring President, Joseph Hutchinson, for the interest that has been taken by him in this League, as well as for the very able manner in which he has conducted this Convention.

The motion unanimously prevailed, by a rising vote.

Mr. Kirkbride. I move that a vote of thanks be also extended to the officials of Los Angeles, to her Chamber of Commerce, and to the gentlemen of this city who have so favorably received us and extended the courtesies that have been granted us.

The motion unanimously prevailed.

Mr. Weldon. I think a very hearty vote of thanks is due to our efficient and amiable secretary, Mr. Mason, for the manner in which he has conducted the business of this League during the past year. We all know that on him has fallen the real work of the League, and such a slight recognition at our hands is due for his faithful services. I move that the thanks of the League be extended to him.

The motion unanimously prevailed, by a rising vote.

On motion of Mr. Macaulay, of San Jose, duly seconded, the convention thereupon adjourned, to meet at the City of San Jose on the second Wednesday in December, 1902.

The publication of the proceedings will be continued next month.

## What the Cities are Doing

Redding citizens want a public library.

Merced has accepted its new sewer system.

Redding is improving its street lighting service.

Grass Valley made a profit of about \$7000 on its water works system last year.

Los Gatos has chosen a site for its new Carnegie library on University avenue.

Santa Monica will soon vote on the question of reorganizing as a city of the fifth class.

Vallejo is considering the calling of a bond election for the purpose of water works improvements.

Napa will hold a special election on Feb. 3 to elect a councilman in place of R. Cuff removed from the city.

Vallejo, Dixon, Redding, Kern, Benicia and several other towns have increased the rates of saloon licenses.

San Rafael's street lighting service has been improved and the system now includes 30 arcs and 250 incandescents.

New city officials were installed the first of the year at Santa Barbara, Sacramento, San Francisco and Ventura.

Napa's new public library building is now ready for occupancy and the library is being installed in its new quarters.

Chico sewer bonds have been delivered and the money is in the treasury. Bids for construction will be awarded next month.

Pasadena has sold its improvement bonds amounting to \$300,000 at 4½ per cent interest to the Oakland Bank of Savings at a premium of \$4,501.

Last month the city of Eureka voted to issue \$30,000 bonds for a high school building and \$85,000 for sewers. Bids for the sale of same will be received on March 3d.

The contract for constructing water and light

works for the Town of Lemoore has been awarded to James Stanley for \$20,000. The bonds were sold to J. A. McCormack for a premium of \$1000.

Mayor Hanford of San Bernardino is determined to force the question of acquiring an electric light plant to an issue. He has been acting as a committee to investigate the subject and as he says "is full of electricity."

Corona's election on bonds for a system of storm drains resulted negatively. The trustees were strongly petitioned to call an election, with the result that less votes were cast favorably than there were signers to the petition.

Healdsburg's electric light system has reached its limit and there is a demand for more lights. The trustees are considering the installation of a steam plant and generator to

supply the deficiency and the issuance of bonds for this purpose.

### Personals.

Chiefs of Police John D. Gall of Stockton and J. A. Kidward of San Jose have resigned.

J. L. Moyer has been appointed Street Superintendent and City Engineer of Santa Barbara.

### Reports Received.

Annual reports have been received from E. E. Unger City Auditor of Los Angeles, and C. R. Stibbins of Riverside. These reports show careful detail in preparation and contain valuable information concerning the financial transactions of the two cities for the past year. The Los Angeles report contains fine half tones of the city officials.

## NOTICE OF SALE OF BONDS.

Sealed proposals will be received until MAR. 3, 1902, at 6 o'clock P. M. by the City Council of the City of Eureka, Calif., for \$30,000, 4½ % School bonds, and \$85,000, 4½ % Sewer bonds. They will be in denomination as follows.

School bonds \$375.00; Sewer bonds \$708.33½, dated on or after April 1, 1902. Principle and interest payable at the office of the City Treasurer of the City of Eureka, Calif., Interest payable semi-annually, 1-40 of the principle pay-

able annually, all in United States gold coin.

All bids must be accompanied by a certified check for 5 % of the bid payable to the Mayor of the City of Eureka, State of California.

The City of Eureka contains a population of, approximately, 10,000, assessed valuation \$4,000,000, with no bonded indebtedness.

Bonds issued under the Act of February 25, 1901.

J. P. WUNDERLICH, City Clerk.

### PUBLIC RECORDS

Should be indexed by means of the

## Card Index System

Simple  
Convenient  
Necessary

For Public Officers, Libraries, Abstractors, Real Estate Agents, Insurance, Engineers, Physicians, Dentists, Druggists, Loan Ass'ns.



Y. & E. Card Index System.

Are Your Records Secure?  
Are Your Records in Order?

They are not unless they are filed in our

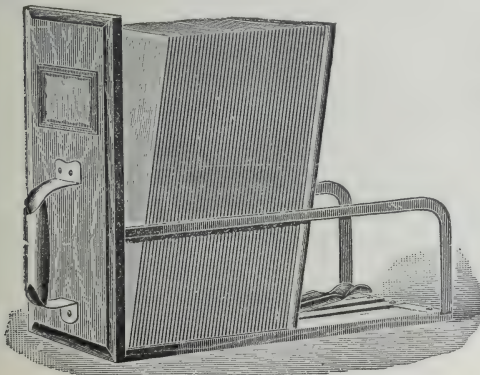
## Lang Document File

Made in Metal and Wood.

Send for Catalogue.

Yawman & Erbe Mfg. Co.,

39 New Montgomery St.,  
SAN FRANCISCO.



Lang Document File.



# Modern Asphaltum Pavements.



Cost no more than Bituminous Rock pavements and are 100 per cent better. They do not roll or go into waves and are not spongy or soft under the heat of the sun. Our pavements are tempered to stand either extreme heat or extreme cold and are impervious to water.

We use nothing but the best and highest grades of asphalt and are prepared with the latest improved machinery and appliances and do only first class work.

Have had ten years experience in laying asphaltum pavements on this Coast and in many prominent Eastern Cities, and know our business from the ground up.

**All our work guaranteed.** Specifications and advice on asphalt construction furnished free on application.

## ALCATRAZ ASPHALT PAVING CO.,

124 Sansome St.

San Francisco, Cal.

### GLADDING, McBEAN & Co.

MANUFACTURERS

#### ARCHITECTURAL TERRA COTTA

Hollow Tile Fire Proofing

VITRIFIED SALT GLAZED SEWER PIPE

TERRA COTTA CHIMNEY PIPE AND TOPS

Roman Brick, Fire Brick, Tile and Clay

#### FARMER'S DRAIN TILE, ETC.

SAN FRANCISCO OFFICE:

MANUFACTORY:

1358 & 1360 MARKET ST. LINCOLN, PLACER CO. CAL.

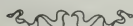
The *FIRST* impression of a city or town is the lasting one.  
 The *FIRST* thing that one sees is the streets of a place.  
 The *FIRST* thing a city should secure is "good streets."  
 The *FIRST* pavement in the land is bitumen.  
 The *FIRST* bitumen comes from Santa Cruz.  
 The *FIRST* job rejected where it has been used is yet to be found.  
 The *FIRST* thing for you to do is to write them for information.  
 The *FIRST* contracting firm is the City Street Improvement Co.  
 And the LAST thing Perfect Satisfaction and Joy forever.

**MILLS BUILDING, SAN FRANCISCO CAL.**

5,250,000,000 gallons of water  
 pumped per day by

## Worthington Pumps,

**Henry R. Worthington,**  
**NEW YORK.**



Pumping Machinery for all Duties.  
 Water Works and Hydraulic Engineers.  
 1,750 Cities supplied with Worthington  
 Pumping Engines and Meters.  
 Oil Meters a Specialty.

### **Pacific Branch:**

**132-134 First St.,  
 SAN FRANCISCO.**

Send for Catalog and Water Works Lists.

## PACIFIC SURETY COMPANY OF CALIFORNIA.

Paid up Capital, - - - \$250,000  
 Surplus as to Policyholders, 325,000

### **GUARANTEE AND CASUALTY.**

**Surety on Bonds.** Bonds of Suretyship issued  
 on behalf of persons holding positions of trust.  
 We also act as surety on Bonds required in Court,  
 proceedings.

Steam Boiler Inspection and Insurance.  
 Plate Glass Insurance.

WALLACE EVERSON, *President.*  
 JOHN BIRMINGHAM, *Vice-President.*  
 A. P. REDDING, *Secretary.*

**HEAD OFFICE:**  
**326 Montgomery St., San Francisco.**

## Redwood Poles

For ELECTRIC PLANTS, TELEPHONE,  
 TELEGRAPH & POWER COMPANIES.

## Union Lumber Co.,

Room 206 Crocker Building,  
**SAN FRANCISCO.**

Telephone Main 324.





Centrifugal Pump Electrically Driven.

## HIGH GRADE PUMPING MACHINERY

Centrifugal Pumps for High Lifts and  
Direct Acting Steam Pumps  
Specially Adapted for Municipal Water Systems.  
SPECIAL CRUDE OIL BURNING  
APPARATUS SUPPLIED AND INSTALLED  
GAS ENGINES, STEAM ENGINES, BOILERS, ETC.

Byron Jackson Machine Works

411 Market St., San Francisco, Cal.

**Half-tones and  
Zincographs**  
The Best—Nothing Else

**Yosemite Engraving Co.**

Etchers and  
Engravers of  
**Printing Plates**

24 Montgomery St., S. F.  
Phone Bush 290

**Use Yates' Paint**

On all Public Work.

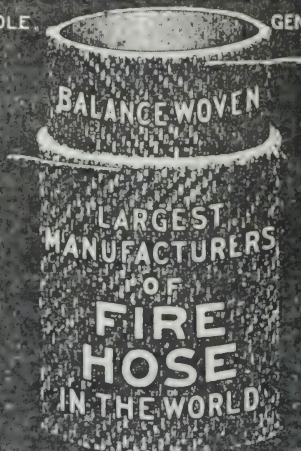
**It is DURABLE.**

Manufactured in  
San Francisco, at 117-119 Market Street.

**FABRIC FIRE HOSE CO.**  
68 MURRAY ST. NEW YORK.

W. T. COLE

GEN. MANAGER.



PATENTEES AND SOLE MANUFACTURERS OF  
**WAX AND GUM TREATED  
FIRE HOSE**

San Francisco Headquarters at 509-511 Market St.

New York Belting & Packing Co. Ltd.

**The Tracy Engineering Co.,**  
151 Fremont St., San Francisco.

Nordberg Corliss Engines.  
Allfree Automatic-Expansion Gear Engine.  
Shepherd High Speed Vertical Marine type Engine.  
Prescott Duplex Steam Pumps.  
The Tracy Automatic Damper Regulators.

The Tracy Steam Traps.  
The Tracy Cooling Tower and Condensing System.  
Wainwright Feed Water Heaters, closed type.  
Brownell Feed Water Heaters, open type.

Contracts taken for Complete Pumping and Lighting Plants. Plans and specifications and estimates furnished.

# CALIFORNIA MUNICIPALITIES

VOL. 6.

FEBRUARY, 1902.

NO. 1.



CANON CREST PARK, REDLANDS, CAL.

SAN FRANCISCO OFFICE . . . . .  
ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

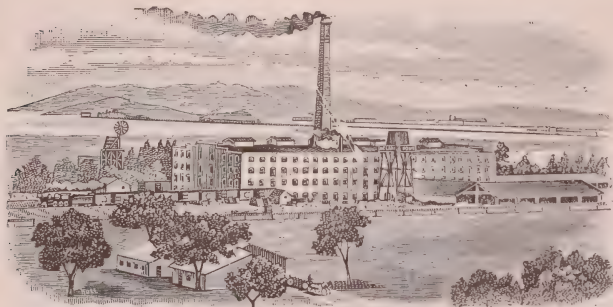
SINGLE COPIES, 10 CENTS.



TELEPHONE MAIN 771.

INCORPORATED JAN. 11, 188

N. CLARK and SONS,



WORKS AT ALAMEDA

MANUFACTURERS OF

Sewer Pipe, Chimney Pipe,  
Caps & Tops, Architectural  
Terra Cotta, Hollow Tile Fire  
Proofing, Pressed Brick, Fire  
Brick, Tile, etc.

Office 17 & 19 Spear St.

San Francisco

TELEPHONE SOUTH, 90.

# STEIGER TERRA COTTA & POTTERY WORKS.

MANUFACTURERS OF  
HOLLOW TILE FIRE PROOFING,  
SALT GLAZED SEWER PIPE, PRESSED BRICK,  
ARCHITECTURAL TERRA COTTA,  
HOLLOW BRICK, PAVING BRICK, DRAIN TILE,  
CHIMNEY PIPE & TOPS, FLOWER POTS ETC.

FINE BRICK

W E DENNISON,  
PRESIDENT.  
J W McDONALD, JR  
SECRETARY  
L A. STEIGER,  
MANAGER.

Office and Yard: 1556 to 1564 MARKET ST.  
and 127 To 131 CITY HALL AVENUE.

Works  
SOUTH SAN FRANCISCO  
SAN MATEO CO.

SAN FRANCISCO, CAL.

J. P. K. OTIS,  
President & Manager.

EDW. P. KING,  
Treasurer & Sup

UNION WATER METER CO.

WATER

Worcester, Mass.

METERS

Union Rotary Piston and Columbia Patterns

Pacific Coast Agent: - - G. FRANK OTIS, 349 Waldo Ave., Pasadena, Ca

38 SPECIAL—32 WINCHESTER

Smith & Wesson's Latest  
The Military & Police Revolver

Perfect Workmanship — Accurate — Reliable —

Adopted by Police Forces—Recommended by U. S. Government  
Inspectors. Catalogue on application to

SMITH & WESSON, Springfield, Mass.

San Francisco Branch, 111 Second St.



# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 6. February, 1902. No. 1

## California Municipalities.

Published Monthly.

H. A. MASON, Editor.

Office of Publication, SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.



### CONTENTS.

EDITORIAL.

Notes . . . . . 3

PROCEEDINGS OF THE CONVENTION.

Municipal Ownership of Public Utilities . . . . . 5

Municipal Sanitation . . . . . 26

Sewage Disposal . . . . . 30

Roll of Towns . . . . . 37

Tree Planting, Etc . . . . . 40

Brief Library Notes . . . . . 43

What the Cities Are Doing—Personals . . . . . 44



An extra number of copies of this issue have been printed and the same may be obtained from the office of publication at 10 cents a copy.

The convention outlined much important work to be done during the year, as will be seen by those resolutions adopted. The first was to request scientific experiments to be made in respect to oil in street construction under the supervision of the engineering committee; also connected therewith the judiciary committee is to investigate the validity of the alleged patents on oil sprinkling. The second resolution appointed a special committee to draft an "advanced" city charter and report at the next convention. The third resolution instructed the executive committee to carry on an educational campaign this year to secure the adoption of the constitutional amendment exempting public bonds from taxation and to secure the defeat of the constitutional amendment creating a State commission regulating all of the public service corporations in the State.



There remains yet to be published of the proceedings of the last convention the papers and discussion of city charters and a discussion on tree planting. These will appear next month.



It will be noted from the discussion of municipal ownership published this month that the operation of public utilities in California have been very suc-



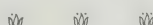
cessful, and there is no desire on the part of the citizenship of the cities operating them to return to private ownership.



The need of ballot machines is illustrated by the recent recount of votes in San Francisco. The invalid ballots in some precincts equal ten per cent of the total vote cast.



There is an opportunity of some philanthropic individual to render a good service to the municipalities of the State by the establishment of a traveling or circulating library on municipal affairs, for the education of municipal officials. When the League has funds to spare, it might be undertaken by that organization.



Municipalities having old material or machinery for sale might do well to advertise it in this magazine. Small towns and unincorporated villages sometimes want to buy second hand hose carts and other fire apparatus, and many other things which the larger cities have outgrown might be of use to smaller towns.

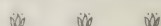


The Board of Supervisors of San Francisco have appointed a special committee consisting of Mayor Schmitz, Supervisors Brauhart, Boxton, Booth, Brandenstien and Curtis to conduct a campaign against assembly constitutional amendment No. 28. This committee will co-operate with the executive committee of the League to secure the defeat of this measure. The campaign will soon open.

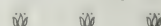


It is to be regretted that Mr. Hutchinson, recently president of the League has ceased to be a public official. Owing to continued absence from Palo Alto he has found it necessary to resign from the Board of Trustees. This does not mean that he has retired to private

life. He is still an honorary member of the League and proposes to continue to be an active member. The League is one of his special interests and he will give it his attention and advice.



We commend the policy of the Oakland Gas Light Co. to the attention of other public service corporations. It has been the policy of this company to voluntarily reduce the price of its services to municipalities as often as possible. Recently it reduced the light service of Berkeley, saving the city \$1000 a year. If more corporations would do this there would be little talk of municipal ownership.



The City of Los Angeles recently sold a street railroad franchise for the sum of \$152,000. This fact illustrates the idea that franchises are very valuable and when corporations require them they are willing to pay for them. It shows the folly of giving away valuable special privileges as has been the custom in the past. Yet at the same time it is doubtful whether in the recent instance, the City of Los Angeles realized the full value of the franchise. The parties purchasing evidently intend to reap a profit on their investment. In this connection another fact is illustrated. The corporation paying \$150,000 for the franchise needs must add that sum to its invested capital upon which it must earn interest or dividends. This means that the people of Los Angeles must pay additional sums in the shape of fares to the corporation which has advanced the franchise value to the municipality. Ultimately before the expiration of the franchise the people must refund to the corporation the value of the franchise paid for. The transaction therefore may be viewed from two standpoints, viz: from the municipality, and from the public. The municipality is \$150,000 ahead. The people ultimately will be out that sum, together with interest thereon.

—PROCEEDINGS OF THE—  
**Fourth Annual Convention**

—OF THE—  
LEAGUE OF CALIFORNIA MUNICIPALITIES.

*Continued From Last Month.*

MUNICIPAL OWNERSHIP OF PUBLIC UTILITIES.

BEING THE PROCEEDINGS OF WEDNESDAY AFTERNOON, JAN. 8TH.

The President. The order of business for this afternoon is the subject of municipal ownership. The discussion will apparently be a sort of go-as-you-please, as there is no leading paper or address upon the subject. It has been suggested that we call the roll of cities, and let the representatives of each city give their ideas upon the subject, and if there is no objection, that will be the course followed. I will ask Mayor Snyder to open the discussion.

Mayor M. P. Snyder, of Los Angeles. Mr. President, and members of the Convention: To my mind, this is one of the most important questions in connection with the administration of the affairs of municipalities. It is a question upon which a great deal can be said. I shall not be able to furnish you with facts and figures, and so shall discuss the question in a general way. My experience with municipal affairs, and the study that I have made of this problem, lead me to believe that there can be no doubt as to the proper course for municipalities to pursue. If I had the power within the State of California, I would direct every city to take possession in the first place of that public utility which is essential to the welfare of every community, that which every individual within the city, and every beast as well, must have, concerning that thing which is as necessary as the air we breathe—the water supply. In Los Angeles we have encountered per-

haps more difficulties in that direction than any city in the State aside from San Francisco. Ten years ago there was a movement started here with the object of the municipality acquiring the water plant. In 1868, when Los Angeles was a small pueblo, and no one residing here then ever expected to see a city reaching out in every direction, containing 48 square miles, upon this spot, a contract was entered into by the fathers of the municipality, who, not realizing the great importance of it, did not see to it that the contract was properly drawn. And to cities that are to-day small, with prospects of a large growth, this is a very important point; remember that in drawing your contracts with private corporations for furnishing the municipality with public utilities, you must be careful to see that they are well drawn, and that when they do expire, you will have no difficulty in coming into possession of those utilities if you have then made up your mind to do so. I think it would be better if you could only make up your mind at once, and never enter into such a contract, but if you do find it advisable, under the circumstances, look to it that the contract is well drawn. The contract of which I speak was drawn in the form of a lease. It expired on July 22, 1898, at which time we expected to come into possession of the water works for the city. But, on account of that contract, we are still to-day paying our



money into the coffers of the water corporation. We were forced by the conditions of that contract to compromise with the Water Company, which we have done within the last year, and to pay them from \$250,000 to \$300,000 more than they were really entitled to under the contract. Our people have voted the bonds to purchase the plant, but we are not yet in possession of it. We have, however, gone far enough to discover that when we do come into possession of the plant, we will have a public utility that will be a source of revenue to the city, and that the income that is to-day being collected from the citizens of this city by the Water Company will more than pay all the necessary expenses for the extension of the plant and its improvements; that the income will be sufficient to pay the interest and the sinking fund, which amounts the first year to \$125,000; and that with all that we can reduce the rates fully one-third. We will be able to do that from the very start. So that is a practical illustration, and answers clearly the first question of those questions which are the subject of discussion this afternoon. There can be no question but that it is a saving to the people. The Water Company, since the bonds were voted, have permitted us, in an indirect way, to have charge of the income. Since the first of September we have been paying the Water Company under the contract 7 % on \$2,000,000, in addition to paying the running expenses (the bonds being \$2,000,000 in amount), and all over and above the 7 % and the necessary expenses is to be turned over to the city at the time that we pay the \$2,000,000. We have thus been able to ascertain what the income is; and, after deducting the 7 % on \$2,000,000 and the amount necessary for the maintenance of the plant, as I say, we have accumulated since the first of September approximately \$95,000.

I think, gentlemen, that the water supply is the first and most important matter in the way of public utilities for

a city to take up. I would advise that no city take up all of its public utilities at one time. With very few exceptions, private corporations rather than the municipalities now own the water works and the lighting system, as well, of course, as the other public utilities. If you undertake to issue bonds for the purpose of taking all of them over at one time, you gain at once the opposition of all of the private corporations, because they are not willing to relinquish their hold upon the money-making propositions that they have in the ownership of public utilities. So the best plan is to take up the water supply first, I think, and fight the company, if necessary, until you have accomplished what you desire there, and when that has been accomplished and you find that the results are what the people expected, that it is costing them less for water than if furnished by private corporations, take up next the lighting system, and there will be very little difficulty in carrying the proposition with the people. And then proceed on down the line until the municipality owns all of its public utilities. When it comes to the management of street railway systems, I believe we will have to proceed very slowly. But even that has been demonstrated to be successful in a few American cities, and in all European cities where they have adopted the policy of municipal ownership of even street car lines.

There is another matter to be thought of in this question of public or private ownership. If private corporations control them, the public utilities being a great source of income, it means centralization of wealth into the pockets of the few, which I believe is not for the best interests of the country at large. You will hear people who have stock in a water company or a gas company or a street car company—and I do not know but there may be such here, nor do I care—who, since men are selfish by nature, are looking out for their own interests, and they, of course, are against

public ownership. And the argument that they use, and that some others who do not own stock in private corporations use, is that if the municipality owns the public utilities, that makes a political machine out of it. That looks like a pretty strong argument against the proposition, when we consider how cities are sometimes governed, and how the corporations do get hold of them. But under our California laws, the legislative bodies of our municipalities have the fixing of the water rates, for instance. I do not know, gentlemen, how it is with the cities that you severally represent, but I have had more or less to do with politics in Los Angeles for the last twelve years, and I have never seen a convention in Los Angeles, whether it was Republican, Democratic, or Populist, where the party had a ghost of a show of electing its nominees, at which the Water Company was not present with its sack. Why, these corporations are not only in politics now, but they always will be, so long as there is private ownership. And it seems to me that that makes a strong argument of it the other way. You gentlemen who have tried for a long time to accomplish public ownership, will know that what I say is true. You have had these men out with their axes and their sacks, and they have endeavored to have men elected who would fix water rates to suit them, and prevent any such thing as a thought of public ownership. So I say again that this is a good argument against the proposition that public ownership means the making of a big political machine. The thing we want to consider is, in each case, is the proposition a good one, and, if run on business principles, can it be run successfully? If it can, then it is a proper measure for adoption by the municipality. Moreover, if it is not properly run, who is to blame for it? It is the people who elect the officials. If you put honest, conscientious officials into office, and put into the organic law of the city a civil service system that

must and will be enforced, you will find, gentlemen, that all of the public utilities will be a source of revenue to the city as well as a money saving proposition to the tax payer. (Applause.)

The President. As San Diego has had some experience with the question of water works, I will call upon Mayor Frary to tell us of their experience.

Mayor F. P. Frary, of San Diego. San Diego's experience in municipal ownership has been quite limited. For the past five months we have been operating a water plant under municipal ownership. It was, I believe, 1893, when we started in to purchase a distributing system of a thousand inches of water. At that time \$1,500,000 of bonds were voted for the purpose, but immediately thereafter we were thrown into litigation, which continued for about five years. It was a very bitter fight. The old company threw every obstacle they possibly could in our way, endeavoring to knock the bonds out, and finally succeeded. The new company was all the time working against the old company and getting their rates lowered. Consequently the water rates were dropped down somewhat every year by the old company. Then the city again took hold of the water question and voted \$600,000 of 4½ % bonds, which were sold at a premium of \$25,000. The bonds were voted in May last, and the city took the plant in July. In our city the water rates are fixed on the first day of July for the ensuing year, and consequently there has been no change in rates. But, as I say, the rates have been crowded down by competition until they are as low there as the city could furnish the water for. In answer to one of the questions here, I will say that the employees of the city who operate this plant are the old employees of the water company. I believe there was only one new office created, that of superintendent; the Board of Public Works elected a superintendent to take charge of the works. We find the employees very efficient,



and everything is running very nicely. During the past five months the plant has cleared about \$3,000 a month, and we estimate for the coming year that it will run about the same, unless we have plenty of rain this winter. At the present time, the supply of water is pumped from the San Diego River, but, on account of the extremely dry seasons that we have had for the past four years, we have had to put in five auxiliary plants. We have small gasoline engines and pumps, and a flume that runs the water down to the main chain of wells. A wet year would do away with the necessity of using the five auxiliary plants, and we could furnish the water from the main wells, which will make a saving of from \$1200 to \$1500 a month. The service is more efficient than under the old style of private ownership. So far as fire protection is concerned, that is the same, and insurance rates remain the same. The water is of course not any better, because it comes from the same sources. As to our accounting system, we run it through the city accounts just the same as we do with our other city accounts, and we consider that we have a very efficient system of accounting in San Diego. We keep a separate account of all new improvements, and of operating expenses, and everything of that kind. We are making improvements all the time. Since we have taken over the system, we have expended, or contracted to expend, about \$18,000. We now have under consideration an expenditure of about \$23,000, in the way of replacing one of the large mains on one of our principal streets. A portion of the system needs considerable repairing and new work, as the pipes are old and have deteriorated until some of them must be replaced. With regard to the considerations governing the employment of employees, which is one of the questions asked, politics have not so far cut any figure with us. I am not prepared to state what will be the case in that regard in the years to follow. Prior

to municipal ownership with us, the corporations were distinctly in politics all the time. In fact, it was one of the leading questions that came up; every campaign one of our candidates for an office would be the Water Company's candidate, and the other would be the other side's candidate. Consequently, the Water Company cut a decidedly large figure in politics. I think there is no desire among our citizens to return to the old system of private ownership, because we are very well satisfied with the present working of the municipal plant. San Diego has nothing else in public ownership along the line of public utilities, but I hope we shall have in the course of time.

Mr. H. P. Brainard, of Petaluma. I would like to ask the gentlemen how they arrive at the proper rates to be charged the consumer.

Mr. Frary. In fixing the rates for private corporations, we of course figure the plant at so much money—I think they estimated it at from \$500,000 to \$750,000. Then the Committee on Fixing Rates figured the operating expenses, and allowed them a reasonable rate of interest upon the capital, I think 6 % on the amount invested. That question came up every year when we fixed the rates, as to what the capital should be, and so on, and it generally took from three to six weeks taking testimony and examining the reports of the corporation, to arrive at a valuation of the plant. The corporation, of course, valued it at about \$1,000,000, and it took considerable expert testimony to get it down so as to get the rates right.

Mr. J. W. Keegan, of Santa Rosa. How do you settle the rates under the municipal plan, Mayor Frary?

Mr. Frary. Our water rates are fixed on the first day of July of each year, and we have thus far made no change since taking over the system five months ago. We will fix the rates again on the first of July coming, and then the question will really come up for the first time, after we have had our ex-

perience of a year.

The President. Santa Cruz has, I believe had considerable trouble in these matters, and I will ask Mayor Parker to respond for his city.

Mayor J. P. Parker, of Santa Cruz. Mr. President, on account of an attack of bronchitis, may I ask to substitute our City Clerk, Mr. J. L. Wright, who has all the information necessary?

The President. We will be glad to hear from Mr. Wright.

Mr. J. L. Wright, of Santa Cruz. I am wholly unprepared, Mr. President, to go into anything like an intelligent of this subject. I will say that it is one in which I feel, as perhaps all of you do, a most vital interest. I believe heartily in municipal ownership. Perhaps, Mr. President, if you should ask the questions, I might be able to give you some answers.

The President. Do you find the rates of service to private consumers more or less under private ownership?

Mr. Wright. They are decidedly less under municipal ownership.

The President. Is the service more or less efficient?

Mr. Wright. It is more efficient.

The President. How about the cost of the service to the municipality itself?

Mr. Wright. It is decidedly less. The service is less expensive by reason of the competition that we have, and it is more efficient because of the fact that our system is much more perfect than that of the private corporation.

The President. Have your insurance rates increased or diminished?

Mr. Wright. They have greatly diminished, by reason of the better fire protection afforded. In fact, the fire protection is very much better than we could possibly get from the private corporation.

The President. Do you earn a profit upon the system?

Mr. Wright. We do not earn a profit, that is, to any great extent, owing to the fact that the litigation and trouble that has devolved upon the city on ac-

count of the fight made with the private corporation ever since the municipality began with its system.

The President. Omitting those extraordinary expenses, do you earn a profit?

Mr. Wright. Yes, we do.

The President. How do you tell that? Do you keep separate accounts so that you can tell?

Mr. Wright. We keep separate water accounts from the other accounts. They are all finally transferred to the general account.

The President. How about the character of the water?

Mr. Wright. The municipal water is considered by all those who use it a purer water; that is, there is less alkali in it, and it is a softer water.

The President. Where does it come from?

Mr. Wright. From Laguna Creek, a distance of about 14 miles. The private Water Company's water comes from several different sources; one is in somewhat the same direction, but there is considerable alkali in it. One of their sources of supply is contaminated a great deal by dairies and stock ranches at the head of the stream.

The President. Are you stating from this rumor, or have you had analyses made?

Mr. Wright. Analyses have been made, a number of them, and the water has been pronounced by experts to be purer water.

The President. Have you investigated the question of waste water?

Mr. Wright. We have not. I might ask the question, What is meant by "waste water"? Is it the water that flows from the power plants, or is it the general waste of consumers?

The President. The general waste of consumers.

Mr. Wright. The question has not been taken into consideration, by reason of the competition. The opposition has done everything it possibly could to prevent the city from furnishing water



to private consumers, and hence they have been allowed to use it practically without let or hindrance.

The President. You do not have meters, then?

Mr. Wright. We have no meters, except on the power plant. Our rates are altogether flat rates.

The President. And you have no inspection to see if there is any waste?

Mr. Wright. We have a superintendent and other employees that go around and try to protect it as much as possible but unless there is extraordinary waste, nothing is done.

The President. Have you any ordinance that makes it a penalty to waste water?

Mr. Wright. Yes. We have an ordinance providing for the management of the system which also provides for waste of water.

The President. Have you ever punished anybody under that ordinance?

Mr. Wright. No, that has not been done, as I say, largely because of the corporation allows them to use all they want to use. That corporation has more water than they have any use for, and so they let them use it ad libitum, except outside the city limits, in what is known as East Santa Cruz.

The President. In your accounting, do you separate improvements from cost of operation?

Mr. Wright. In one sense of the work, yes, and in another, no. They are all kept in the same account, but can readily be ascertained. It is always stated in the accounts what the improvements are, and they can be segregated at any time.

The President. Then you would have to go to the vouchers to segregate, or are they kept separate in the books?

Mr. Wright. No, they are not kept separate in the books.

The President. Has your town inspected the system of bookkeeping recommended by our League?

Mr. Wright. We have not.

The President. Do you not think it

would be a good idea to adopt it?

Mr. Wright. Perhaps it would, yes.

The President. Are improvements to the water works promptly made?

Mr. Wright. They are.

The President. How are the employees appointed?

Mr. Wright. The legislative body appoints them. There are two members of that body here, and I am not able to speak for either of them.

The President. It is suggested in one of the questions that there may be personal or political interests involved in the selection.

Mr. Wright. I do not think we have that with us; I do not think any political influence is considered in such matters. I think that, barring myself as one of their appointees, they have selected men whom they considered would render the best service to the city. I feel very sure that that is the case.

The President. How many employees have you in the water works?

Mr. Wright. The water works have only three regular employees, a superintendent, a bookkeeper or the collector, and he has one assistant on the outside. They are appointed, the superintendent by the council, and the other men are employed by the superintendent. The outside man is a man who has been with the company ever since it was established, and who helped put in the system.

The President. Has there been any complaint made about the efficiency of the employees of the water works?

Mr. Wright. It does not reach my ears, if so.

The President. Prior to the municipal ownership, did public service corporations interfere in municipal affairs?

Mr. Wright. They did, yes.

The President. Do they still do so?

Mr. Wright. To the extent of their ability, they do. They endeavor to elect officers who will carry out their wishes with respect to fixing water rates, and such matters as that, which will enable them to derive a greater benefit from

their private system.

The President. Has the old company a regular schedule of prices?

Mr. Wright. Yes, they have a regular schedule of prices. It goes into effect, as has been already stated, on the first of July.

The President. Rates are fixed in February for the year beginning with the following July, are they not?

Mr. Wright. Yes. In that respect Santa Cruz is not different from other cities.

The President. Does there seem to be any desire on the part of your citizens to return to private ownership?

Mr. Wright. Not one, so far as my memory serves me, except those directly interested in the private corporation. But for the fact of the unfortunate litigation that we had, the great trials that the city has passed through in that respect, I am sure public opinion would be unanimous in favor of the public ownership of water. The litigation is probably over now. The question is before the Supreme Court of the United States, and I really expected to have a telegram announcing their decision yesterday, though it has not come.

Mr. Parker. Mr. President, there is just one criticism I would make of Mr. Wright's remarks, and that is of the insinuation belittling the one who has answered your questions so well.

Mr. W. M. Bowen of Los Angeles. I would like to ask whether or not the water system of Santa Cruz is under the direct supervision of the council, or whether they have a Water Commission.

Mr. Parker. It is directly under the supervision of the City Council.

Mr. Bowen. Do you believe that that is the best system of managing the water plant, or would it not be better to have a commission appointed that would be entirely independent of the council?

Mr. Parker. Perhaps in a large city it would be better to have a commission. I have not looked upon it as a necessity in small cities, from my study and observation.

The President. Santa Ana is the next town in order owning its water works, and I will call upon Mayor Ey.

Mayor Frank Ey of Santa Ana. Our City Attorney, Mr. W. F. Heathman, will speak for us in that respect.

Mr. W. F. Heathman of Santa Ana. There are certain things that come under my observation, things that I have noticed during the last ten years, about the water system of Santa Ana. I will begin by saying I cannot make any comparison of a water system under private ownership, because a very short time after the incorporation of Santa Ana, she adopted municipal ownership of water, and we have had it ever since. We think it is a very good thing, and we do not want to give it up under any circumstances. We have a system that we are real proud of, and I wish that all members of this convention might go down there and take a look at its workings. For a city lot of 50 feet front, with an ordinary house on it, the nominal flat rate is \$1.00 a month. For the excess, where a larger amount of water is supposed to be used, we have a rate of 10 cents for 100 cubic feet, which is ten cents for 750 gallons. We pump our water from the ground into two reservoirs, and from these reservoirs it is again pumped throughout the mains. We have our own fire hydrants, I do not know exactly how many, but Mr. Reed sits behind me, a very modest gentleman, who would not undertake the matter that I am now engaged in, and after a while I want you to call on him for the figures, and he can give them to you. I think the system is certainly paying for itself, and has always paid for itself, and a large surplus to the good.

The President. Did you issue bonds?

Mr. Heathman. Yes, we issued bonds when the works were built about ten years ago, and they are about half paid off. I am no able to tell you whether the amount has been paid specially out of the water fund. But it is a known fact in Santa Ana that the water system



has always paid and more than paid the running expenses. We have two engineers, and a third man who works about the power plant (we have the Holly system), and our superintendent of water and sewers makes the fourth man in connection with that work. We use the crude oil in the furnaces, and whenever a fire breaks out, we have very fair pressure. But Santa Ana is growing so fast, and especially has it been growing fast in the last five or six years, that she has outgrown the water plant, and something will have to be done by the trustees, and that in the very near future. So I should have to say that our system is hardly adequate at present. But certainly we have no use to complain of the system. The price that I have given will illustrate whether or not we have cheap water in comparison with private water systems. We think it is cheap. There is no doubt that it is excellent water. In fact, I have not heard a complaint about the water, or the system or its management in Santa Ana.

The President. It it artesian water?

Mr. Heathman. I should call it artesian water. Some few years ago I believe it flowed, but in the last few years, it has not flowed above the surface, and therefore we have had to resort exclusively to pumping. It certainly taps an artesian water belt.

The President. How about your accounting system?

Mr. Heathman. We have a water fund. All the receipts from the water go into that fund under a late resolution (rather late, though) introduced by Trustee Finley, that all the proceeds from the water works be devoted in future to the extension of the system, and to charges that might properly be brought against the water system. I have not investigated the League system of accounts that you speak of.

The President. Mr. Mason is willing to visit any city that wants to inspect it and needs to inspect it, and explain it. It is a system that originated with

Mayor Snow of Oakland when he was auditor, and is very valuable. I just make that suggestion, not only to yourself, but to all others here present. Do you use meters?

Mr. Heathman. To a limited extent. As to the large consumers, I believe the superintendent puts water meters on for them, particularly the railroads there, the Santa Fe and the Southern Pacific. They are paying the meter rate that I mentioned a while ago, 10 cents per 100 cubic feet.

Mr. James H. Devine of Sacramento. How do you charge livery stables?

Mr. Heathman. We put a meter on for them, and they pay meter rates.

Mr. Snyder. How is your water system managed, by the trustees or by a commission?

Mr. Heathman. Indirectly by the trustees.

Mr. Snyder. That is, they appoint the commission, do they?

Mr. Heathman. They appoint the employees. They employ Mr. Reed here as superintendent of the water works, and under him are two engineers, and a fourth man whose duties I do not accurately know. I notice in the list that there one question, as to whether any body is appointed out of political friendship or influence. I am very glad to say that if there is a town on the Pacific Coast where political influence does not count, it is Santa Ana. We are a Republican city, but we have a city clerk who is a Democrat and who has occupied his position for fourteen years, and I think he can hold it for fourteen years longer, if he wants to. And as to the appointments, as long as I have known anything of it, I have never known any man to be appointed to an office in the water works, or in any other capacity in our city, by reason of his political preferences. Politics is wholly ignored. Moreover, we never had an old party ticket there. In conclusion I will say that we are so well satisfied with our water works system that if we can extend it to some other

utilities that we have in Santa Ana, we will be profoundly grateful.

Mr. Ey. I think that the delegates might listen with some profit, perhaps, to Mr. Reed, our superintendent of water works, who can answer questions just as fast as you can put them to him. His whole life has been devoted to the water question, and he knows nothing better.

Mr. J. W. Macaulay of San Jose. What percentage is charged off to wear and tear with you?

Mr. R. Reed of Santa Ana. I can only answer questions with reference to the operating expenses—questions from a mechanical standpoint.

The President. Santa Ana's report is certainly a very good one. We will now pass to Vallejo, and I will call upon Councilman P. B. Lynch to reply for his city.

Mr. P. B. Lynch of Vallejo. I have jotted down a few figures in regard to the subject, in order to expediate matters. Taking up the questions that have been asked here, in answer to the first, Are rates of service to private consumers more or less than under private ownership? I will say that they are very much less; in fact, we get water for about half what we did under the Chabot system. Is the cost of service more or less to the municipality? It is less. Is the service more or less efficient? It is very much more efficient. With reference to fire protection, and whether insurance rates have been reduced, I will say that the water pressure is about double, and that insurance rates have been reduced considerably. Is the city earning a profit above cost of operation, interest paid, and depreciation? For the year 1900, the money collected for the use of water in the City of Vallejo was \$28,580.40. We paid off one bond and interest on the remaining, \$22,250, leaving us a profit of \$6330. What the depreciation is, I am not in a position to state. But we are that much ahead of the game now. Is the water purer than that supplied by private

company? is the next question. It is certainly very much purer, because the health officer in Vallejo had condemned the old water some time prior to the beginning of municipal ownership. As to an accounting system, I will state that we have a clerk of the water department who attends to nothing but the books in connection with that department. We have a water superintendent, who is also the street superintendent. We have also a man who goes around and reads the meters. Do we separate improvements from the cost of operation in our accounting? We do. And the improvements are very promptly made, as promptly as possible. As to what considerations govern appointments, in our town, while I have been a member of the Board, I have not seen anything considered except merit, and we have never had any complaints at all about the employees of the water system. We keep a man at the water works continually. He is deputy water superintendent, and is a very good man. So is the superintendent an excellent man, and I can say the same of all the rest of the employees. With regard to promptly discharging inefficient employees, we have never had any inefficient employees to discharge. The public service corporations prior to municipal ownership certainly did interfere in municipal affairs. The first time we voted on the question of raising bonds to get our municipal water supply, they fought us very bitterly, in fact, they defeated us at the first election. In the second attempt, we defeated them. At the present time they are entirely out of the rate, not selling any water at all except for irrigation. There is absolutely no desire on the part of any citizen to return to private ownership. So far as waste is concerned, we have found that there has been a great deal of waste in Vallejo, and most of it could be accounted for, I think, in this way: When we originally bonded the city, all we could raise was \$250,000, and that amount of money was not sufficient to



put in cast-iron pipe. We had to put in sheet steel, lap-welded pipe. That was about ten years ago, and the life of that pipe is now about ended. We are preparing to raise some more money by another bond issue to change the pipes into cast-iron pipes, proposing now to bond the city for \$80,000. The last two years we have raised \$35,000 by special tax, so that we will have \$115,000 with which to put in the new cast-iron pipe, and I think that will remedy all defects.

The President. What are your rates?

Mr. Lynch. The meter rates are 20 cents a thousand gallons.

The President. Does that include bathtub, etc?

Mr. Lynch. Yes. It does not include the lawn, though.

The President. How about the lawn?

Mr. Lynch. That was the reason we had to adopt the meter system, because the people wasted so much water. We have installments now 250 meters.

Mr. Devine. Do you operate any elevators?

Mr. Lynch. No, no elevators.

Mr. Keegan. I would like to ask if 20 cents is not just as great a charge as you paid the private corporation?

Mr. Lynch. No, it is not. We paid a great deal more than that. In Benicia they are paying 75 cents a thousand gallons. In our distributing reservoir we have 715,000 gallons every 24 hours coming in, and the Navy Yard at Mare Island is using our water. When the present system was started, we concluded they would use about 50,000 gallons a day, and in place of that they use about 250,000 gallons, and they are gradually increasing the amount required. There is going to be a large dock built there, and that will be a great drain upon our water system. So we are going right ahead with this bond election as fast as we can.

Mr. Keegan. Where does the water supply come from?

Mr. Lynch. From Green Valley Falls, 22 miles distant from Vallejo.

Mr. Keegan. You say it is purer

water than the supply you had from the private system?

Mr. Lynch. Yes, it is very much better. The water of the old company was condemned by the health officer.

Mayor J. J. Hanford, of San Bernardino. In your estimate of the cost of the iron pipe, what size of pipe do you figure on?

Mr. Lynch. On 14-inch pipe.

Mr. Hanford. About how many miles of that will you put down?

Mr. Lynch. Of that pipe, I think about 16 miles. It comes from a point called Creston to the distributing reservoir.

Mr. C. N. Kirkbride, of San Mateo. Mr. Lynch remarked about raising money by a special tax, and I would like to ask him under what provision of the law they raised it.

Mr. Lynch. I cannot state under what provision of the law, but it was done.

Mr. Kirkbride. Did you have a vote upon the question before making the levy?

Mr. Lynch. No. We put it right in the tax levy.

Mr. Macaulay. Are you working under a charter, or otherwise?

Mr. Lynch. Under a Freeholders' charter, which provides that we can levy the tax without submitting it to the people. I think there is a limit of a dollar for such purposes as that. Mayor Snyder asks some questions with regard to who has charge of the water system. In Vallejo the water system and all public utilities are under the direct supervision of a Board of Public Works, and I may state that we regard that as a first-class nuisance in a town like Vallejo. If any little question of any kind at all comes up that is going to injure somebody, it will be passed over from one board to the other. We have a public wharf in Vallejo, and there has been a wrangle straight along as to who has the supervision of that wharf. As a matter of fact, the Board of Public Works has, but they refuse to

appoint a wharfinger, and the Board of Trustees appointed him, and ever since then there has been a continual clash between the two bodies with regard to the wharf. The water system employees work very much more harmoniously. But we think the two boards constitute a nuisance.

The President. By whom are their salaries fixed?

Mr. Lynch. They are fixed by the charter.

Mr. Snyder. Is your Board of Public Works selected by popular vote?

Mr. Lynch. Yes. The Board of Trustees appoint the Superintendent of Streets, who is also the superintendent of the water works.

The President. Sacramento is the next city. I will call on Trustee James H. Devine.

Mr. Devine. We have had municipal ownership of our water works in Sacramento for many years. We have got an excellent system in Sacramento under our present charter. It is not a meter system. We sell the water to everybody for a lump sum. I think there is a great deal of waste on account of not having meters, and there is undoubtedly a good deal of injustice in relation to the amount sold to corporations and some individuals. For instance, we sell a brewery water for about \$50 a month, where it ought to be \$150, because we have some very large breweries in Sacramento. I have endeavored to get the meter system adopted, but I cannot do it. However, the people there are satisfied with the water supply, which is a very wholesome one, and there is an abundance of water. We employ in our water works three engineers and three firemen, and we have extra men to wash out the boilers occasionally. We have a city tapper, and two assistants to look after the matter, and if anybody wants water, application is made and these men are sent.

The President. Are the men all appointed from considerations of merit?

Mr. Devine. Yes. Politics cuts a

good deal of figure with us in Sacramento generally, and if a vacancy occurs, the Mayor is very likely to put in a friend. The Mayor has the appointment, and the matter then comes before the trustees for confirmation. While some people have found considerable fault with our charter, I think we have a good, safe charter for any municipality. I thoroughly believe in having the Board of Trustees pass upon the fitness of any man for office who may receive the Mayor's appointment. We intend in the near future to spend a large sum of money for improvements. If we do not change the system, we intend to run a large main from one side of the city to the other, east and west—either a 24-inch main, or two 16-inch mains—and have them connect with the laterals, which will give an abundant supply to our growing city. I believe we deliver our water cheaper than any other city in the United States, and there is an abundance of it for everybody. It is true that in stormy weather, as we get our supply from the Sacramento River, it is much roiled up, and it has to be purified for family use. In the summer time it is as clear as anywhere. With considerable waste and extravagance in municipal management, we are delivering good water and very cheaply. There was a conspiracy to sell the water supply of Sacramento without giving the people a chance, and that is what brought me into politics. The newspapers and people who are under the pay of these corporations which have desired to get possession of the water supply of the city, denounced the water as impure and not fit for family use. Of course, if a newspaper is well paid for furthering a scheme, its writers will write very elaborately about things that are not true. But we beat them, lies and all. Our system of keeping accounts in Sacramento with reference to the water system is very good. The city collector collects the rates. The people go to him and pay their water rates, and at the end of the year the



City Auditor makes out a report of the whole of the transactions of the city government. The cost of the water and the profits arising from it are all given in this report, and I shall certainly take great pleasure in forwarding to the secretary of this League copies of the auditor's report, so that they may be referred to at any time. I will say that we intend to change our source of water supply and get it from the American River, about 22 miles east of Sacramento near Folsom, where there is an endless supply, and from which we get a pressure of perhaps 100 feet when it reaches the city, which will do away with the cost of pumping machinery, and help to operate it, and will deliver the water to a four or five-story building without any difficulty whatever. The original cost will be considerable; it may cost a half a million dollars to put it in. But it will reduce the cost of the water to the people by more than half what it is now, and that economy will be for a long time to come. As it is now, we occasionally have to buy a new pump, or some other piece of machinery. I think the city derives something like \$60,000 a year from the system now, which is one of the reasons why some private corporations want to possess themselves of the privilege of supplying us,

Mr. E. E. Bolton, of Hollister. What does it cost per thousand gallons?

Mr. Devine. I could not tell you just at this moment. I will say that it costs us about \$7.50 per million gallons for pumping.

Mr. Parker. I would like to ask what is the approximate cost to the consumer with you?

Mr. Devine. For a house of six rooms, it is \$1.00 per month, and they can use all the water they want.

The President. What is it in Santa Cruz, Mayor Parker?

Mr. Parker. It is 60 cents.

Mr. Lynch. It is 75 cents in Vallejo.

Mr. Devine. Yes, but in Sacramento we derive a profit of \$60,000 a year,

and if it was in private hands we would of course not get any of that.

Mr. Parker. In Santa Cruz, with its 6000 inhabitants, we have earned in the neighborhood of \$8000 to the city per annum.

Mr. Bowen. I understood you to say that you had collectors.

Mr. Devine. If I made that statement, it is a mistake. The people as a general rule pay their water rates. As the city collector has four deputies, when they refuse to pay, he can spare one, and he goes out among the people and collects the unpaid water rates.

Mr. Bowen. Is the profit that you speak of used for any other purpose than the sinking fund and interest on operating expenses?

Mr. Devine. It goes into the general fund, and is used for all purposes. No commission handles the water works. The Board of Trustees under our charter is divided up into committee. The water committee has practical charge of the water works; it investigates the cost of repairs, and recommends to the Board of Trustees, and the Board acts upon the recommendation. In a city of the size of Sacramento, I don't believe the commission is necessary; I believe the councilmen or trustees should pass upon all such matters.

The President. San Bernardino is the next in order.

Mr. Hanford. Previous to 1893, our city was supplied by artesian wells. The whole valley where it is located is in an artesian belt, every one having a well. The city put in fourteen or fifteen wells about 100 feet deep. As the demand arose for water lower down, they commenced to come up our way and sink wells, and in the course of time they dried up nearly all of the wells that used to flow on the higher elevations. So the city was compelled to look elsewhere for water. At that time there was gravity water coming into the city from Old Baldy Mountain, and the city made a contract with the people owning it for twenty years for 100 in-

ches at a rental of \$4950 a year, and there was a clause put in the agreement giving the city an option to purchase that water before the first of July, 1903. If they had made the deal in 1893, it would be at \$50 an inch, and it increased every year until it would reach \$600 an inch. The city put in their own reservoir and from 27 to 30 miles of pipe, and bonded the city for \$160,000 for that. San Bernardino was then just a mile square. Now it contains four square miles within the city limits, and there is a great demand for water coming from the new portion of the city. Our people are now expecting to hold a bond election, within the next two or three months, as we do not want to wait until the last minute, and purchase the water supply. The attorney for the owner of the water told our City Attorney only the other day that the owner was hoping that something would happen so that we would not buy him out at all. The cost of water per inch in our valley has gone up to \$800 or \$1000. There is very little of it left, too, even at that price. We can borrow money for about 4%, and we are paying now on the basis of about 8¼%. We have other water propositions before the city, such as pumping, but we find that the gravity system is the best and the cheapest. We have but one man employed, and he gets house rent free and \$60 a month. Our water collector receives 5% of the collections. Those are the only two employees. The system is controlled by the Water Committee of the Board of Trustees. Three years ago our water collections did not amount to over \$700 or \$800 a month. Now they are over \$1600, which is something over \$19,000 a year. Our rate is \$1 for each house, regardless of whether it has one person or twenty. We have no meter system at all. It is a flat rate, \$1 per house, and 25 cents for sink and bathtub, and 50 cents for sprinkling for the lawn. We consider this a very reasonable rate. Moreover, it is one of the best money-making in-

stitutions that we have in our city. We managed to pay off a bond of \$8000 a year when we bonded the city, and I believe there is a little left after the entire expenses are paid. The funds in our town are kept in just about the manner they are in Sacramento. None of the money can be taken from the water fund for any purpose whatever except for water purposes and expenses of the system.

Mr. Ey. How much do you charge the railroad company?

Mr. Hanford. The people of our place look upon the Santa Fe railroad Company as a very big boon to the town. We were willing to give them almost anything they asked to come there. They made a contract with the city several years ago upon a basis of \$75 a month for 10 miners' inches of water, which is about 9 gallons a minute. We found that there was waste, in the last two or three dry seasons, and so passed ordinances upon the subject, and in that way were able to guard ourselves. In the winter time there is a surplus. The Santa Fe contract runs out in August, and they have asked for terms, informing the Board that they intended using a very large quantity of water. What will be done by way of a contract, I don't know. It is probable that if the dry seasons continue, the board will make an investigation to find out how much the Santa Fe is using, and it will be charged accordingly.

Mr. Keegan. I cannot understand what particular reason so many of the delegates can have for being in earnest on the subject of municipal ownership, when so much charged for service. Some of the rates indicated are larger than I have ever paid a private corporation for water. I would like to ask Mayor Hanford why municipal ownership is such a good thing when you do not reduce the rate.

Mr. Hanford. We look upon the rate of \$1 per house as a very low rate. I know I have paid \$1.50 in other towns for the house alone. We have not had



any question about the water rates, and unless those things are brought to the attention of the Board of Trustees, we do not bother with them.

Mr. Ey. The reason I put the question to Brother Hanford was that both railroad companies had a flat rate with us, and we thought they were using more water than they were entitled to, and we put on a meter, and instead of paying from \$40 to \$46, they are now paying \$150. With us, everybody who uses more water than he ought, has a meter put on. We are charging \$1 flat for everything, but the moment a person is seen abusing the privilege, his house is metered, and he pays at the rate of 10 cents per 100 cubic feet, or 750 gallons, and we have over 100 meters now in operation.

Mr. B. Morse of Riverside. Do you measure your water by the inch, or does it run through the meter, that is supplied to the railroad company?

Mr. Hanford. It is measured now by meter, but about a year ago when water got scarce in town, the trustees thought that the Santa Fe was using more water than they ought to use, and so a meter was put on, and an engineer measures it every month, and it varies very little from 10 inches up the present time.

Mr. Devine. Was your city ever supplied by a corporation?

Mr. Hanford. Not to my knowledge. The whole valley was nothing but wells in earlier times. Now the water is going down, as I said before, and most of the wells do not flow, though some of them are still flowing, and as high as 380 inches of water.

The President. Santa Rosa will next be heard from. I will call on Mr. Keegan.

Mr. Keegan. We have a peculiar condition of affairs in Santa Rosa. We do not believe there that a public utility should be a money-making proposition. I would just as soon go down into my pockets and pay a millionaire a water bill. The question of municipal ownership is a deeper question than money-

making, gentlemen; it is money saving—a service to your population. We have established a municipal water plant in Santa Rosa, and we have maintained it for six years without a water rate. The poll tax collector (and you cannot call a water rate collector anything else), has never called upon a citizen of Santa Rosa, and we invite all of you people to come up and inspect the workings of our system.

Mayor W. H. Turner, of Merced. Tell us how you do it.

Mr. Keegan. We pump over a million gallons every day the year round, with our small city and comparatively small plant. If we had a larger population, we could reduce the average expenditure. We have the dollar limit in Santa Rosa, under the charter, and the water plant is run inside the dollar. We own our sewer plant and fire department, with new buildings, and I will state incidentally that we have worked on the sewer plan, and the maintenance of it all is included within the dollar rate. Payment for the water plant is not included within it, however; an additional rate is allowed. Our water plant last year was maintained at an expenditure of \$7276.83, and our population is something over 7000.

Mr. Turner. What is your property valuation?

Mr. Keegan. I do not remember just what it is.

Mr. Devine. How much do you assess your people to pay for the water plant?

Mr. Keegan. Just enough to make the annual payment on the bonds and pay the interest, and that amount of course reduces each year. We issued 4 % bonds running for forty years.

Mr. Snyder. Do I understand that the amount that you mention, \$7276.83, includes the repairs necessary and the employees, the pumping of the water, and everything?

Mr. Keegan. Yes, that is the total expense.

Mayor George E. Catts, of Stockton.

Where does your supply come from?

Mr. Keegan. We pump it from the ground, a depth of about 42 feet. Just to make a comparison, I will state that it costs Santa Rosa just about the same to maintain the municipal water plant without water rate as to maintain the fire department. This is of course a new thing, but I believe you all ought to look into the matter a little. There is not a citizen in Santa Rosa who does not believe that municipal ownership comes up in just the form there used, and in no other.

Mr. Ey. This is a proposition such as I never before heard of, Mr. President. Do I understand from the gentleman that it is all included in the dollar limit, cost of bonds, operation and all?

Mr. Keegan. No. The operation and maintenance of the plant is included within the dollar levy, but we have a special tax to pay the interest and an annual payment on the bonds. The \$7276.83 that I mentioned comes of the general fund, just as anything else does. As I before suggested, we run the plant just as we do our fire or sewer department.

The President. This is very interesting, and, if there is no objection, I will ask Mr. Keegan to write a paper for the magazine upon the subject. Oceanside is the next town. Mr. Goetz.

Mr. C. J. Goetz, of Oceanside. Oceanside reports briefly as follows in regard to its water system, Mr. President. The plant has been run by the city since 1890, previous to which it was run by private parties. The original cost, including water rights, old plant, and main, was \$15,000. Since that time about \$9000 more has been spent in obtaining more water-bearing land, wells, new pump, and mains. The water is pumped from eight bored wells from 60 to 90 feet deep. The pump is a compound condensing pump, of a capacity of 750,000. Crude oil is used as fuel. Water is delivered in the reservoir 225 feet above the pump, at an average cost of 9½ cents per 1000 gallons. Rates

are much less than under private ownership, but the comparison is hardly a fair one. The rates during the last six years have been reduced about 60 %, owing to improvements to the system, reduced price of fuel, and more efficient management. One of the improvements which helped in reducing the rate was the metering of all consumers. This reduced the waste of water very materially. The water was originally from surface wells, but since the deep wells were put in, the quality of water has been much improved. The better service, purer water, and reduced rates, makes the system a matter of pride to our citizens, and there is absolutely no demand for a return to private ownership. Further improvements, looking to a reduced cost and still better service, are now being considered by the Board of Trustees.

The President. Santa Barbara: We will hear from City Engineer J. L. Moyer.

Mr. J. L. Moyer of Santa Barbara. I shall confine myself to answering the questions. The city of Santa Barbara does not enjoy a monopoly. The private corporation is still doing business at the old stand. The rates to the consumers are the same. This is owing to the fact that we are extending our source of supply, which is a water tunnel driven into the Santa Ynez mountains about twelve miles north of our city. As to the cost of service to the municipality, it saves about \$6000 a year over what it would have to pay for the sprinkling of the streets and flushing of the sewers, and so on. The service is much more efficient. Under the old company's regime, the pipes were filled only about one-third of the time, and that principally at night time. The fire protection is now much better than it was before. We carry about 100 pounds of pressure to the inch in the business portion all the time, which obviates the necessity of a steamer. The water is much purer than that supplied by the private company. As to waste water,



we meter wherever we think necessary, and depend upon the vigilance of the superintendent to prevent any waste. Our accounting system is in the hands of the Board of Water Commissioners. Improvements have been very promptly made. I cannot state as to what considerations govern the appointment of employees. The Board of Commissioners is appointed by the Mayor, and they appoint a superintendent and a clerk.

There have been no employees discharged so far, and we have been running in all about three years. I cannot say whether private corporations interfere in any way with municipal affairs. I never had any experience showing that they did.

Mr. M. Walsh of Petaluma. Did you bond your city for this work?

Mr. Moyer. In the first place we bonded the city for \$50,000, but the bonds had some flaw in them and were rejected, and we simply issued an increased tax to the general fund, and took \$50,000 out of the general fund and paid for the water system.

Mr. Walsh. Was that larger than the dollar limit?

Mr. Moyer. We were not operating under the dollar limit at that time. Last year we voted \$60,000 in bonds for extending the system, and the extension is in process of construction now. I do not think there is any wish on the part of any of the citizens of Santa Barbara to go back to private ownership.

Mr. Devine. Is yours a subterranean source of supply?

Mr. Moyer. Simply a percolation through the sandstone shale. It depends entirely upon the rainfall.

The President. The next city is Elsinore. Will Mr. Traphegan respond?

Mr. C. S. Traphegan of Elsinore. We pump the water into a 400,000-gallon reservoir, and that supplies every house in town, at a minimum rate of \$1 and 1 cent a foot for lawns or flower gardens, and, under the meter system, 15 cents a thousand gal-

lons. It costs us about 10 cents a thousand and gallons to pump it, and we use gasoline or distillates. We employ two men in our water system, and it is not competitive at all—we let it by contract. The two men get together, or whoever see fit to bid on the job, and take it that way. Politics has never had anything to do with it at all. In fact, we don't have any politics in Elsinore. Our ticket is usually put up by petition, and a man's politics is not questioned. Our little town is bonded for \$20,000, and we pay off a \$500 bond every year, and reduce the tax for bond purposes 5% every year. It creates a sufficient fund to extend all the mains and make the necessary repairs. The city has owned its plant for four years. When we started in to build a plant, the other water company folded up its tent and quit; they could not compete with us at all. Theirs was a gravity system. As to the comparison between a pumping system and a gravity system, there is no comparison at all; the pumping system is always more expensive to maintain than the gravity system, and there should be a difference in the prices charged for water.

Mr. Keegan. It makes a difference where you are pumping it. If you pump it right at the point of using, practically, you do not have a 25-mile pipe, for instance, and a dam, and if you figure the interest on the cost and maintenance of the latter, and of laying your 25 miles of pipe, I am inclined to think you will find it will cost you more than the other system.

Mr. Traphegan. I do not agree with the gentleman on that. A pipe line has a good long life, if properly put in, and does not cost anything to maintain it. On the other hand, the pumping machinery is always wearing out.

Mr. Devine. It seems to me that the gravity system is by far the more economical: that while the original cost is far greater, once paid for, it is much better.

The President. I think Palo Alto

and Santa Clara are the only remaining towns that have municipal water works, and Mr. Mason will tell you of theirs when he is speaking about the electric light works a little later. At Palo Alto, to use the language of Mayor Hanford, we think it is the best paying institution in town. We get better service, better water, with cheaper rates than the private company give us, and we never think of going back to the old system. As to the electric light plant, I am not quite sure of that. I opposed putting in the electric light plant, because I thought the company that had their plant their could give us cheaper light. But they put in the municipal plant, and the engineer has a lot of figures, which I do not understand, to show that the electric light is cheaper than that furnished us by the Redwood City company, and also that it pays. Our water works and electric light plant are run together, and it is impossible to keep the accounts separate and distinct. Dr. Marx of Stanford, and his brother, have very elaborate figures, which they reported at the last convention, and I hope they may be correct about it. Both water and electric light systems are becoming too small, and we must invest more money in them, the town is growing so fast. As to rates for electric light, I do not think that in midwinter I have ever paid more, under meter, than \$3, for a house of ten rooms, about lights in the house. That is so cheap that I cannot see how they can make a profit out of it.

Mr. Morse. What are your rates per thousand watts?

The President. I could not tell you that.

The Secretary. I think it is ten cents.

The President. The January or February number of CALIFORNIA MUNICIPALITIES of last year contains an account of it all.

Mr. Morse. What fuel do you use?

The President. Coal and slabs chiefly. The electric light question is a

question that many delegates have come to get information upon, and I will ask Mr. Morse of Riverside, to speak to us upon the question.

Mr. Morse. We started the operation of our municipal plant in Riverside is 1895, being then a city of about 7000 people. We did not know very much about the matter, and so we went rather slowly. We voted \$40,000 in 5% bonds, and sold them at a premium, the intention being to put in a steam plant. On investigation of the plan that had been adopted, we found that we would not be justified. So we made a contract with the Redlands Electric Light & Power Company for power generated by their system in the Mill Creek canyon, 200 horse power, at \$3 per horse power per month, to be measured at the peak load, that is, at the highest point of power which the ampere meters would show we used at any time during the 24 hours. We did not at that time know the difference between an ampere meter and a watt meter. But it proved an economical contract for us to make, although it has not worked out as well as some of us thought it was going to. We put in a distributing system, and put up about 85 arc lamps of the Holly type. We built a line to bring the power from the power-house. The system worked very satisfactorily until we had to think of more power for electric purposes. So last year we voted \$40,000 more in bonds, and put in a steam plant, as the water became very low, this steam plant being an adjunct for the distributing plant we had already. We put up our own sub-stations, where the transformers reduced the power from a voltage of 10,000 to 2200. We used a three-phase alternating current, so that it could be handled by our system and used in all our houses. We supposed in the first place that we would have about a thousand incandescents in addition to the 85 arc lamps. We have been going a little over five years now, and we have 12,000 incandescent lamps, and



they carry 67 arc lamps on the street lighting system of 2000 candle power each. Our street lighting costs us probably less than any other city in the United States—certainly less than any city I know of. We credit our electric department with the actual cost of 2.2 c per kilowatt hour for a light. In San Francisco they pay  $3\frac{3}{4}$ c. The lowest city in the State of Massachusetts pays 4c. I happen to have an article published by an eminent electric authority in Boston upon that subject, and I find that the cities in Massachusetts run all the way from 4 to 13 cents per kilowatt.

Mr. Turner. How much is that for a 2000-candle power light.

Mr. Morse. We allow \$4 per month for each 2000-candle power light, or \$48 a year.

Mr. Turner. We pay \$9.45.

Mr. Morse. Before we had our own system, our first contract was for \$15 for arc light; afterwards it was reduced to \$12. I think even at \$4, our system is now paying us all its expenses, and furnishing enough money to pay a bond annually and the interest on the amount due, and last year, after doing all that, we had something over \$1000 clear profit. The party from whom we purchase our power generates it by water power or steam, as he sees fit, and transmits the power to us. The balance we generate by steam, using oil as fuel.

Mr. Brainard. How many hours do you run?

Mr. Morse. We run a 24-hour service. We get our 300-horse power the full 24-hours, and we sell power in the day time for manufacturing or street railway purposes, or anything else for which it may be needed, in the town. Our rates for day power are 3 cents per kilowatt.

Mr. Turner. Do you have a moon-light schedule for street lighting?

Mr. Morse. Yes, but we can have it every night if we desire, and it does not make any difference.

Mr. Turner. It only costs you \$4 for an all night service?

Mr. Morse. Practically so. After 11 o'clock we shut off our steam and run the other, because we do not need to run the steam plant. The rates for incandescent lighting are the same that other companies charge, which is 15 cents per 1000 kilowatts. If any man uses over 5000 kilowatts per month, which comes to 85 cents, which is our minimum rate (and you will find that all other companies that I know of charge \$1 as a minimum)—it is less.

Mr. Parker. How much would a 16-candle power light cost?

Mr. Morse. If you are enquiring as to a flat rate, we have raised our flat rates, because we find that a certain trait of human nature has developed so that a man will not shut off his light when he does not need it, and, if you charge him so much a day, he will burn it all day. We have some parties of that sort. In fact, we have come to the conclusion that it was best to and have now metered them all. If a man wants to be liberal with the use of it, he can have just as much as he wants. If he uses over 5000 kilowatts, his rate is 10 cents for the excess. Moreover, we do not install a meter for less than five 16-candle power lights. Last year we put them on at 85 cents, if they ran a 16-candle power light, and the rates for anything less than five lights would be a flat rate of 85 cents for 32-candle power, 50 cents for 16-candle power, and 35 cents for 8-candle power.

Mr. H. Poston of Pomona. What is the minimum price per horse power?

Mr. Morse. We furnish electricity for power at 3 cents per thousand watts. 746 watts is one horse power, so that we practically sell it at \$2.25 per horse power for day service.

The Secretary. Are the citizens of Riverside satisfied with your works?

Mr. Morse. They are very thoroughly satisfied, and have given us more money to go on with the work, and endorsed our action on last Saturday night in contracting for 1300 horse power for future delivery.

Mr. Bowen. What was the cost of your distributing plant?

Mr. Morse. It cost us \$33,000 to put up the distributing plant. To make that produce anything for us, we had to take some money out of our general fund and extend it. The plant now stands us \$88,000—a little over that, because we have expended something since the first of July.

Mr. Hanford. How much territory do you cover with your lines?

Mr. Morse. Riverside is the biggest city in the State in area, containing 56 square miles. We extend our lines down what we call the valley at least ten miles in length of wire.

Mr. Hanford. The engineer told me that he had 76 miles of wire.

Mr. Morse. I should think that would be about correct.

Mr. Hanford. I asked that question to show the enormity of the plant Mr. Morse is talking about. I was astonished at the results of an investigation that I made over there, which has thoroughly convinced me that the only solution of the electric light question is municipal ownership. There is not a city in California but ought to own its own plant. Whenever we have heretofore tried to bring up the question of a municipal electric light plant, the private companies would try to mystify you with kilowatts and amperes and volts, so as to keep from you the actual facts. You may be sure that the city of San Bernardino is going to put in its own electric plant, for the people within the next few months will have an opportunity to vote the necessary bonds to do that. We are paying only \$6.50 a light now, but we have to stand insults and abuse. The people of San Diego ought to take particular note of this, as they pay \$10.50 per arc light, as I understand. Not very long ago I went down there to find out what they were doing, and, incredible as it may seem, they were then paying \$15, whereas if the city owned the plant, it ought to be done for \$4.

The Secretary. Mr. Morse, there was an article on electric lighting published in our magazine a short time ago. I want to ask you if that article was substantially correct?

Mr. Morse. Yes, it is substantially correct; a copy of our annual report.

The President. We will now hear from Mayor Parker of Santa Cruz, as to the experience of that city.

Mr. Parker. I am not very much of an electrician, but I can tell you approximately what the expense per street light per month is with us. It is a little bit hard to segregate our accounts, as our electric plant is combined with a pumping plant for a portion of our sewerage. I think a year ago we reported that it cost us \$3.85 per month per light, as near as we could segregate the expenses.

Mr. Turner. Are your lights 2000-candle power?

Mr. Parker. No, 1200-candle power. Wood has gone up some in our vicinity, and we have not put in oil yet, and we expect it will cost us a little more than that this year. To be safe about it, I think I should say that today it is costing us about \$4 per 1200 candle power light for our street lighting.

The President. What did the plant cost?

Mr. Parker. That was so long before my day, even, in Santa Cruz, that I cannot say.

The President. The plant is entirely satisfactory, is it?

Mr. Parker. It is somewhat inadequate. The lights burn comparatively well, but it is an old system and should be renewed. I started out myself with the proposition to get a new system, with the idea of getting current from a water system owned by a private corporation. We had a very fair proposition offered us, but the prejudice of Santa Cruz against going from municipal ownership to private ownership was so great that it was impossible to do it. In fact, they are more willing to go to the expense of getting an oil plant



for the purpose of generating electricity.

Mr. Turner. Are you sure that you get 1200-candle power.

Mr. Parker. That is the capacity of our lamps. We have 74-light dynamos (I presume that is what they are called). The dynamos as I said before are not the latest pattern, by any means.

Mr. Morse. Mr. President, I will say that if there are any gentlemen present interested in learning about an electric plant, if they will go down to Riverside, we will take particular pains to tell them everything we know about it, and show them our plant, how we operate it, and the figures and all details.

Mr. Hanford. What volume of business are you doing there at the present time?

Mr. Morse. We collected \$30,000 last year, and it will be \$45,000 this year. We have now three or four hundred horse power more than we had before.

The President. Mr. Mason will report for the town of Santa Clara.

The Secretary. The matter of water works and electric light works in Santa Clara, I shall treat very briefly. What I wish to give the convention at this time more particularly is some figures connected with the operation of our municipal gas plant.

It is the only municipal gas plant in the State, and being a new subject of municipal ownership, it will probably interest you.

First as to our water system, however, which has been in operation for six years. The rates are 25 % less than were previously charged by the private corporation supplying us, our fire protection is a great deal better (which was one of the main incentives through which the city sought to establish its own system), and I think I may say it is satisfactory in every way. It is a pumping system. We pump an average of 500,000 gallons a day, or say about 150,000,000 a year. The cost of pumping is less than 2 cents a thousand

gallons. The charge to consumers, flat rate, is \$1; the meter rate is about 10 cents. A few meters have been installed, but no meter rates have been as yet charged excepting to one or two consumers. Fire insurance rates have been reduced to some extent; that is to say, there has been a readjustment, and in some districts they have been reduced, while in others there is perhaps no change. Our electric lighting system was installed as a sort of supplement to water works. We had about seven or eight thousand dollars left after the water system was installed, which we put into the street lighting system. No lights are furnished for commercial purposes at all. It costs us \$3.20 a month for 2000-candle power lights burning on a 1 o'clock moonlight schedule. The lamps we know are operated to their full capacity; that is, they operate under 50 or 55 voltage, and an amperage of 9.6, which gives a supply of about 480 kilowatts to each lamp.

Our gas plant is somewhat interesting. About two years ago there was a demand on the part of the public to the Board of Trustees that some additional lighting system be provided so that commercial lights could be secured. The Board of Trustees investigated the question of furnishing an incandescent system and also a gas system, and came to the conclusion that it would be better and more economical for the town to invest in a gas plant rather than to enlarge the electric system. So a little over a year ago \$30,000 in bonds were voted for the purpose of installing a gas plant, and it was completed about the first of last February. During the first few months, while the service was satisfactory in every way, the consumption was comparatively small, and, incident to the first establishment of the plant, there was some little extra expense, so the figures which I shall give are for the last six months' operations. The system is known as the Low crude oil system. No coal whatever is used; simply the cheapest grade of Bakersfield

oil, which costs us f. o. b. Santa Clara at the present time 70 cents a barrel—24 cents at Bakersfield, and the rest is freight. But the contract is exceptionally low, even for our place. The first year under contract it is to be 70 cents, the second year 75 cents.

1901.	GAS MADE.	OIL USED.
July	.....271,200 ft.....	3670 gals.
Aug.	.....330,900	.....3904
Sept.	.....353,800	.....4233
Oct.	.....436,900	.....5167
Nov.	.....427,900	.....5541
Dec.	.....440,900	.....6093

Total 2,261,600 28608  
Amount of oil per 1000 ft. 12.20 gallons.  
Cost of oil \$476.75.

Statement of Gas Consumed by Private Consumers.

July.....	219,200 feet.
August.....	292,200 "
September.....	313,000 "
October.....	378,600 "
November.....	374,800 "
December.....	395,200 "

Gas consumed by town 1,973,000  
27,200

Total Consumption 2,000,200 feet.  
Loss by leakage, condensation and consumed at works, 261,600 feet or 12 per cent.

REVENUE.

2,000,200 ft @ \$1.75 per M .....\$3500.35  
cost.

Operating Expenses \$1334.49

Interest Paid ..... 731.25 ..... 2065.74

Profit \$1434.61

[Note. There are some deductions to be made on account of rebates, the amount of which will approximate \$100.]

Cost of Gas per 1000 feet delivered, operating expense only 75 cents.

Cost per 1000 feet, including interest \$1.03.

Number of meters set, 250.

Mr. Turner. Do you have gas lights in your streets?

The Secretary. No. We have electric lights for street purposes only. Gas is used almost exclusively by private consumers, in stores and residences.

The President. How much is used for fuel?

The Secretary. We have kept no separate account; it would be impossible.

The President. Do many people

have gas stoves?

The Secretary. Yes. Nearly every house that uses gas at all has a gas stove; for cooking principally; not very much for heating.

Mr. Turner. You charge them as much for the gas for cooking purposes as for lighting, do you?

The Secretary. Yes.

The President. Do you know how many gas stoves there are in your town?

The Secretary. There are over 100. We have 250 meters set. The consumption has just about doubled within the last year. In fact, we are supplying about twice as much as the old company supplied. That is largely due to the fact that we have extended the mains beyond what the San Jose company had before.

The President. That takes the place of wood and coal, does it not?

The Secretary. To some extent, but it has not interfered very much with the wood and coal men. One of the principal wood and coal men is on the Board, and he is very much in favor of the gas proposition, and burns it in his own house. So that it is a convenience, and a great convenience, to have gas for cooking, and housewives are very much pleased over the fact that they have convenient fuel at hand that requires very little attention, and no soot or ashes, and no danger attending it. We have displaced practically all the gasoline stoves in the town, and the consumption is increasing all the time. There is no question in my mind but what it will ultimately reach double the proportion of use compared with the present.

Mr. Morse. What effect does the use of gas in the house have upon the health of the inmates? Have you used it long enough to know something about that?

The Secretary. It seems perfectly satisfactory. There are no complaints, so far as I know.

Mr. Parker. They simply attach the gas attachment to the kitchen stove, do they not?



The Secretary. Oh, no. They have a separate burner. It is simply a flat piece attached to the stove, and sometimes simply a large plate resting on a table or stand. Sometimes they use regular gas ranges, of course, where they can cook anything. Those are quite common. The experiment so far has been very successful, and it is really returning more of a profit to the city than the water works.

Mr. Morse. I used gas from a gas stove four years ago myself, and my experience then was that the use of a gas stove in a room consumed all the oxygen, and, even when there was a very high degree of heat, apparently you feel cold.

The Secretary. You are now speaking of the use of it for heating purposes.

The President. Do you have an exit or ventilation pipe?

The Secretary. No.

The President. In San Francisco they have ventilation pipes. There is an ordinance requiring it.

Mr. Hanford. Do I understand, Mr. Mason, that it costs the city only 24 cts. to produce \$1.75 gas?

The Secretary. No. I said the raw material costs that.

Mr. Hanford. Do you know what the total cost of producing 1000 feet of gas is?

The Secretary. With us it is 73 cts. a thousand, delivered to the consumer—not including interest.

Mr. Devine. You feel that you are selling at a profit, do you?

The Secretary. Undoubtedly.

Mr. Devine. Do the profits go into the treasury?

The Secretary. Into the public treasury, certainly.

Mr. Devine. Then they make it back on their taxes. So it is about the same to the consumer.

The Secretary. So far the works have cost over \$34,000. \$2000 had to be advanced from the general fund. That amount has already been returned to the general fund. The policy of the Board of Trustees, as I understand it,

will hereafter be that all of the profits will be used for the purpose of redeeming bonds, paying interest, and providing for extensions—not necessarily for the purpose of reducing the tax levy. When the time comes, they will probably reduce the cost of gas to the consumer.

The President. I believe that closes our discussion upon the question of municipal ownership. It has certainly been very interesting and profitable.

### Municipal Sanitation.

BY DR. J. H. DAVISSON, MEMBER OF THE BOARD OF HEALTH, OF LOS ANGELES.

[A part of the proceedings of Friday, Jan. 10.]

Municipal Sanitation is a most comprehensive subject, and, indeed, a very important one; which requires more time for its consideration in its various ramifications than I can give it at this time.

When we consider that we have 118 incorporated cities in California—all growing, and many of them already large, and many others destined to be so, the importance of municipal sanitation, which means so much for the commonwealth, needs no emphasis before this Convention. The subject includes so much, and has to do with almost every department of a city and its institutions, both public and private, and its utilities as well, hence I shall give a mere outline of some of the best methods to adopt, looking to more perfect methods of improved sanitation. "Sanitation" simply means to be sound or healthy, and, in a more specific sense, means to be clean.

To accomplish this implies first of all the engineering problems of a city which relate to its water supply, sewage disposal, garbage disposal, storm water disposal, correct laying out of streets and alleys with reference to these ends; and also with particular regard for Forestration; the proper placing and con-

truction of public utilities, as lighting, telephones, heating, motive powers and conduits for same; trolley cars; all public buildings, street grades and street paving, etc.

A glance at the situation will at once reveal the great importance of the Sanitary engineer to the well regulated and sanitary city. Experience on these lines brings to light one of the great evils in municipalities, as in County and State Institutions, viz: positions of a professional character are often filled by partisan politics for reward of party service, and not because of skill and fitness as Sanitary Engineers, Sanitary Architects, or Sanitariums of special training.

The tendencies of the times are toward specialism in all lines, and there is surely no more legitimate and urgent need for specialists, skilled in their work by virtue of patient study and ample opportunities, than those who guide the destinies of the modern city, as can the civic Sanitarian, the Sanitary Engineer and the Sanitary Architect. Municipal ownership of all public utilities and their control, under civil service rule, by skilled specialists, is the great end toward which we are tending, and in which we hope to attain our highest ideals in urban communities.

City officials may be honest and trustworthy and good business men, as I believe most of them are, but these are not the only essential qualifications that alone fit them to do the work of skilled specialists, or to fill professional positions, in order to build up the "City Beautiful." From the standpoint of the Sanitarian, the greatest errors to be overcome in Sanitation, either urban, county and State and their various institutions, are committed by officials trusting too much to incompetent Architects or Engineers, or assuming the responsibilities of the Sanitarian, Sanitary Engineer, or Sanitary Architect, believing they were doing their duty in construction, and when the building or institution is completed they turn it

over to the Sanitarian or Board of Health before the contract is let.

In quite an experience in Sanitary work I have had ample opportunity to see the faults of ill-advised construction in every department mentioned. The remedy is simple; to avoid the many almost insurmountable obstacles just recited, place the Sanitary conditions in the hands of the Sanitarian before construction and avoid the many unsanitary conditions after completion. This applies with equal force to all the departments of a well regulated city.

Mayor Low of New York has just given us some examples of his ability to organize a city government on these up-to-date ideas; especially is this illustrated in his selection of a skilled civic Sanitarian—as street cleaning commissioner, in the person of Dr. J. M. Woodbury, who was formerly Sanitary Inspector of the Island of Porto Rico, and was afterward sent abroad by the U. S. Government to make a special study of drainage, and the disposal of sewage and garbage in Berlin, Frankfort and Paris. These three subjects are paramount in urban Sanitation, as they are constantly with us, and their proper administration gives greater returns than any other department that so directly contributes to public health. Disposal of waste, viz: sewage, garbage, dirt and filth from the streets and alleys, and storm water, are all questions to be decided by the Sanitarian and Sanitary Engineer. Every city should abolish the short term contract and its necessary evils, and establish a proper scavenger system; and own and control its own Reduction Works, or Crematory, and collect all waste, or refuse, and operate every department under a competent head, with Civil Service rules for subordinates, when possible. Many cities, under the short term contract, have imperfect Crematories and imperfect methods of collection; and, as a result, much of the garbage finds lodgment upon waste land and vacants lots. "Public Health is public wealth," an



old aphorism which loses nothing of its force in the light of all our recent achievements in city building, and Public Health has been much advanced by our recent discoveries in Bacteriology. To cultivate the "City Beautiful" is to keep it clean with correct sanitary Engineering, wholesome water supply, suitable Forrestration under a competent Forrester; and a conscientious regard for the thorough administration of all public utilities, under a competent and responsible head, should be our constant aim in municipal government.

There is no country where so many conditions favor sewer irrigation as in California, and perhaps some of the arid lands east of us, but the question of profit to the municipality is secondary to the proper disposal of unsanitary waste; yet many interior cities may utilize sewage by broad irrigation, on arid and porous soil, for irrigating almost anything except vegetables and berries, as is being done at present; but we would be compelled to throw aside our knowledge of bacteriology, and our experience in Sanitation, to advocate or sanction broad irrigation of kitchen vegetables, berries, etc. which are served without sterilization by cooking—without purification of the sewage by one of the best modern methods.

The methods of purification are chemical precipitation, (which has not been very satisfactory,) and filtration; but all methods of purification are expensive, and the great dangers from broad irrigation are from infecting vegetables, berries, etc. and water ways with disease producing germs, as the pathogenic germs of typhoid fever, etc. rather than from the odors so much talked about. Cities like Los Angeles, and many others near tide water, can better afford to turn the sewage into the outfall sewer; especially is this true when it is so difficult to keep from infecting vegetable gardens. A porous soil, a dry country and so much sunshine are conditions which favor oxidation, and broad irrigation may prove

the best means of purification under proper restrictions.

Mr. Peters. I would like to ask Dr. Davisson this question: Suppose the sewage were used to irrigate alfalfa, and the hay cut from the field were used to feed cows in a dairy. Would typhoid fever germs be communicated to the milk thereby?

Dr. Davisson. They might be. It depends altogether upon the handling of the sewage and of the alfalfa, as well as of the milk. There are a great many things to be taken into consideration in such a case. This paper, as you see, is generic in its character. It would not otherwise, the field is so very large. Yet it is based on a large experience in such matters. There are many people here who know my views on the subject, as we have had to do with sewer irrigation of vegetables. Those people might be surprised to hear some statements made in this paper as the result of my experience, because I am a little more liberal in what I have said than I usually am upon such matters. That calls to my mind a case that happened about five or six years ago when I was a member of the State Board of Health, down at Oakland. There was an outbreak of typhoid fever, and it was the worst one and the most widely spread of any they had ever had. The State Board of Health ascertained that it was due to a dairy. Upon tracing it a little further, they discovered that the dairy lay across a small stream of water, and the fellow who delivers the milk (whether the dairy was responsible for it or not, I do not know) and watered the milk from waste water in that stream, the water being contaminated with typhoid fever germs. So that was the source of all the trouble. I think there were about 400 cases occurred at that time. That would occur in any event, of course, without reference to the alfalfa or other food of the cows. The danger of contaminating the natural water was and the domestic supply is one of the great dangers and of course,

an insignificant thing may be made the means of spreading the germs of such a dread disease as typhoid fever, as the germ of that disease is a water-born germ.

Mr. Morse. That was a case where the milk was diluted with water that was contaminated, pure and simple.

Dr. Davisson. It came from the contamination of the natural water way, and broad irrigation is liable to do that very thing.

Mr. Morse. Suppose it was in a stream where the cattle drank?

Dr. Davisson. That would not communicate it.

Mr. Snyder. Then what are your conclusions, Doctor? Would you recommend sterilizing, or what would you do with the sewage?

Dr. Davisson. As I stated in the paper, I oppose broad irrigation, and I have said here in Los Angeles that our city could better afford to turn the water into the sea at a proper point than to use it for irrigation with the attendant dangers.

Mr. Snyder. But do you believe that sewage can be purified?

Dr. Davisson. It can be purified by filtration beds. That has been carried on extensively in some sections, notably in the State of Massachusetts, where they have some very extensive plants of that kind. That may be done effectually. But I think some of the smaller cities in the interior, from what I learn here, have been irrigating their fruits and vegetables and certain other things, through the sewage, and successfully so—without any complaint. The condition here are favorable for that state of affairs; that could be done. But it requires caution and restriction. You can use broad irrigation if you have desirable people and careful people, even with vegetables and gardens, but it cannot really be done without fear of infecting the water ways, or the milk, or spreading dangerous disease germs, and for that reason, it is far better not to take any chances with it. It is my

opinion that with large fruit trees or corn, and even with many other things of that kind, that broad irrigation would be all right, especially where they have a porous soil, arid land, sandy soil, and so on, where it is made possible to oxidize the sewage and get rid of the disease germ better than in perhaps any other country. So, if sewage irrigation is to be a success anywhere, it ought to be here.

The President. I thing Mr. Peters' question had to do with the question of alfalfa irrigated with it. He asked whether the milk would be infected if the cows ate of alfalfa from such land. As I understand it from what you have said, it is not possible to have the disease germ communicated in such a way.

Mr. Davisson. I think that is hardly possible. You are aware that very recently there has been some objection to the theory that you can communicate tuberculosis from the cow to man, and from man to the cow. The only question that would come up there would be tuberculosis—if it is possible to communicate it, it might be done in that way. But that is a moot question, and many now delieve that diseases are not so communicated.

The President. Your idea is that it is direct contamination, if any?

Dr. Davisson. Yes. It would be contamination from its contaminating other things. For instance, you cannot handle alfalfa, or potatoes, or turnips, or anything else that is raised with sewer irrigation, covered with disease germs coming out of cess pools and going right into the field—you cannot handle the alfalfa or anything else of that kind in your wagon without contaminating everything else that is contained in the wagon. In some such way as that, you would contaminate the milk. But that is not very likely. The milk would not be contaminated through the cow eating the alfalfa so irrigated.

Mr. Macaulay. Do you think broad



irrigation affects the vegetable and the fruit directly?

Dr. Davisson. No, it does not. It is the depositing of those germs upon them, or the danger of such deposit, that is really to be feared. For instance, the vegetables are served without cooking, as in the case of celery and lettuce, young onions, radishes, and the same is true with the berries; in such a case, if they have been irrigated from the sewage, they are simply reeking with disease, if the disease germ be there. They may in fact be picked right out of the sewage and brought in to the table to be used. On the other hand, you take cauliflower or cabbage, turnips or potatoes, or such things as that, like the cereals, which are cooked previously, and there is no danger whatever from them.

Mr. Snyder. But I can bring potatoes into the kitchen and have them in the sink, for instance, and communicate it in that way.

Dr. Davisson. You can communicate it in any one of these ways. If the Chinaman brings your potatoes directly from the sewer irrigated district, they may be covered with the germs, and that will contaminate everything in the Chinaman's basket or wagon.

Mr. Morse. If I get your judgment right with regard to the alfalfa, if a man irrigates an alfalfa field with the sewage, and then the alfalfa remains thirty days from the time the field is irrigated before the crop is harvested, if the crop of alfalfa is then cut and properly cured in the sun, and removed from the tract of land in a clean wagon, you do not think there would be any danger from that particular source?

Dr. Davisson. I do not. I think you get oxidation in the sun, and you dispose of that. But you cannot trust a Chinaman in the other case.

Mr. Morse. You spoke of filtration in Massachusetts. Can you state any particular cases that you know of?

Dr. Davisson. In Lawrence, Massachusetts, they have made extensive ex-

periments, and, as I have intimated in the paper, I think they are getting away from all those things. Such system is cumbersome and expensive. Yet we are told that in Berlin and Paris they have broad irrigation, and there is no trouble from it whatever. I do not care what the germ is; I only know that I am responsible for what I deal with here, and there are a great many unsanitary things done on this coast, and a great many mistakes made in this broad irrigation (of that I am sure) wherever it may be, and we cannot afford to take these chances. As I say, it is more a question of getting rid of the refuse and of the infection because sewage is an infection, than it is a profit to the city.

Mr. Morse. In one town in Massachusetts that I know of, they started in on filtration beds because they had no means of getting the sewage anywhere else.

Dr. Davisson. It has been done successfully, and the water, after passing through those filtration beds of sand, is clear and almost as pure as any water you will find.

### **Sewage Disposal.**

SECOND DAY, THURSDAY, JAN. 9, 1902.

The Convention was called to order by the President at 10 o'clock A. M.

On motion of Mr. Morse of Riverside, seconded by Mr. Parker of Santa Cruz, an evening session was determined upon, in order to expedite the transaction of the business of the Convention.

The President. The subject for discussion this morning is "Sewage Disposal," which will be discussed under the heads of "Disposal by Irrigation" and "Purification by Septic Tanks." We would like to hear from some representative of Santa Ana.

Mr. Ey. Mr. Tedford is here, Mr. President, and will give you an outline on the subject, so far as Santa Ana is concerned.

Mr. Ed Tedford of Santa Ana. We have about 33 acres of land in our sew-

age farm, and we have had great success in using it. By plowing the ground and changing the location of the water every few days, there does not seem to be any odor or anything that would cause any trouble in that part of the country. We have only had one year of it so far.

The President. What has it cost you?

Mr. Tedford. We bought the ground, and it is on the river, and we have allowed the man to use the sewage in return for his clearing off the land and getting it in shape so that we can plow it and get some use of it. Up to this time it has been in willows and other trees.

The President. You have not got it cleared yet, then?

Mr. Tedford. No, not as yet.

The President. What do you expect to raise on it?

Mr. Tedford. They raise corn, beets, alfalfa, and different products. Until we get it cleared up, we cannot expect to get very much from it.

The President. How far is it from the center of population?

Mr. Tedford. About  $2\frac{1}{2}$  miles.

The President. And how do you carry it down there?

Mr. Tedford. By an outflow sewer, 14-inch pipe.

Mr. Turner. Gravity or force?

Mr. Tedford. Just by gravity.

The President. Do you have flush tanks?

Mr. Tedford. Yes.

The President. Are they automatic?

Mr. Tedford. They are.

Mr. Turner. Do you have septic tanks?

Mr. Tedford. No. We just run the water right out onto the farm.

The Secretary. What is the character of the soil?

Mr. Tedford. It is a very sandy soil; on the banks of the Santa Ana river.

Mr. Kirkbride. What system did you have before you had the sewer farm?

Mr. Tedford. Cess pools.

Mr. Turner. How much of a pipe line have you?

Mr. Tedford. About 6000 feet. We can use all the sewage that we now have on 10 acres, and get it up in good shape.

Mr. Turner. Do you anticipate getting a revenue from your farm later?

Mr. Tedford. Yes, I think when we get it cleaned up and in good shape, we will get revenue enough to pay all the expenses of the sewer system, taking care of the flush system, etc.

The President. Will you get a revenue by leasing it?

Mr. Tedford. Yes. The first lease, of course, was to get the ground in shape so as to be handled, and we get some use of it.

The President. Does the water run off into the river after it has been through the farm?

Mr. Tedford. No. It sinks into the ground, and all disappears, and in changing it around from place to place, it keeps it nice and clean and sweet.

The President. Do you know much about the volume of sewage in thousands of gallons?

Mr. Tedford. In the flush tank we use about 140,000 gallons a day. I don't know just exactly what that would be in volume.

Mr. Morse. About 10 inches of water a day—a little over.

Mr. Tedford. We have about 23 miles of sewer. Of course, the sewer system is a new thing there. The business part of the city is all connected up, practically, and a great deal of the residence part, to the sewer system.

The President. Is the farm within the corporate limits?

Mr. Tedford. No, it is outside.

The President. How much did it cost?

Mr. Tedford. About \$300. We bought it at the same time we put in our system. We voted bonds for the sewer system, and the sewer farm was a part of the general plan.

The President. Was there any op-



position among the people?

Mr. Tedford. No, there was not.

Mr. Turner. Do you pump the water?

Mr. Tedford. Yes.

Mr. Turner. Do you allow the surface water to go into the sewer?

Mr. Tedford. No.

Mr. Parker. What do you do with the surface water?

Mr. Tedford. We have quite a fall to the east and south, and we have no trouble in carrying off the surface water. Our pipe runs from 14 inches down to 4 inches in size, in our system.

The President. Do you have sewers to all of the houses in town?

Mr. Tedford. Not all the houses, no. Outside we permit cess pools yet—when the sewer system is over 200 feet from the residence, they are allowed to do that, provided they put them in according to the specifications, under the directions of the Superintendent of Sewers. We do not require any one to go over 200 feet to the sewer.

The President. What has been done with the old cess pools?

Mr. Tedford. We had them cleaned out, lime put in, and they were filled up. We have an ordinance requiring that.

The President. Did you fix a limit of time?

Mr. Tedford. Yes. We give them ten days' notice generally to clean them out. They come in and make an application, and we send the sewer inspector there to see what condition the premises are in, and have the sewer cleaned and disinfected, and then we give them a permit to connect with the sewer. In fact, they are required to connect with the sewer, within certain limits. We first took the center of the city, and then extended the limits, and now the limits take in all the city. Of course, these matters have to be taken step by step. As long as they attend to the matter in good shape, we do not force them on the extreme outside. The property owner is himself allowed to make connection with the sewer and run a

pipe to the house, and no bonds are required as to putting the street in good condition again. The superintendent sees to it, and sees that the ditches are filled up and thoroughly tamped, in good shape.

The President. The responsibility is all on the superintendent?

Mr. Tedford. Yes. The men who do the plumbing are under bonds, however, to do good work, and our inspector inspects all plumbing, which, if it does not come up to the requirements of the ordinance, is condemned.

The President. Then the contractor putting in the connection with the sewer can open it up without the inspector being present, can he?

Mr. Tedford. No, he cannot without his presence. He goes to the office, gives the location, makes his application and then does the work, and before it is filled in, the inspector goes and examines all pipes and the connections, and so on, before it can be covered.

The President. Suppose a new part of town builds up and applies for connection with the sewer, and they are more than 200 feet away from any sewer. Does the town pay for the extension?

Mr. Tedford. We have not so far. We have covered the town so thoroughly that it has not been necessary to take up that matter.

Mr. F. B. McKevitt of Vacaville. What is the grade of your system?

Mr. Tedford. I cannot give you the exact figure on that.

Mr. McKevitt. Do you consider that it is necessary to use as much water as you do?

Mr. Tedford. We might get along with less. But you see there is a good deal of our sewer system that there are no connections on, and we want to keep everything nice and clean, and so we run a lot of water through them. We think it is better to do that than to let them dry up.

Mr. Kirkbride. Do you take the water from the Santa Ana River?

Mr. Tedford. We own our own water works, and pump it. We used to run right into the river for our water, but it got a little dry, and we have had to pump more or less for the last four or five years. We pump the water into the reservoir, and then have the Holly system there.

The President. What did your entire system cost?

Mr. Tedford. We voted \$65,000 in bonds, and then we got it put in for \$59,000, which paid for farm and all.

The President. Have the cess pools caused any trouble with the water, and has there been any seepage from them?

Mr. Tedford. No as to both questions. The cess pools are not very deep.

The President. What is the nature the strata of earth in your town?

Mr. Tedford. The first 6 or 8 feet is a sandy, loam soil, and then we strike a gravel bed, and most all of the stop in that. If you go down further you strike clay, but not exactly a hardpan.

The President. About how many houses are connected with the sewer?

Mr. Tedford. About 600.

Mr. Kirkbride. Do you anticipate any damage suits from the use of the sewage farm?

Mr. Tedford. I don't think so. I could take you down on that farm, and you would not know that it was a sewage farm unless they told you about it. It is kept in a nice, clean condition.

Mr. McKeivitt. Do you have an idea that if your soil was heavier, of a clayey or adobe nature, that your system would be successful?

Mr. Tedford. It would require more attention. You would have to change it around more. I think in time maybe, take a town of the size of the larger cities, the safest way would be to take the sewage to the ocean. It years to come we can attach to our outpour sewer, and let it run into the ocean.

The President. How many miles will that be?

Mr. Tedford. About  $7\frac{1}{2}$  miles to the bay.

Mr. W. Peters of Riverside. How often do you have to change it now?

Mr. Tedford. We change it every three or four days.

Mr. Peters. Has there been with you any condemnation of the products of the sewage?

Mr. Tedford. None that I have heard of. No one has raise a question about that.

Mr. Morse. Do you have a man attending the sewage on the farm all the time?

Mr. Tedford. The man who has the farm takes care of it, and is clearing up the farm and is putting it in shape, at no expense to the city.

Mr. Morse. Your main product, as I understand, is corn and alfalfa?

Mr. Tedford. Yes.

Mr. Morse. There would not be any trouble from disease germs from the use of sewage?

Mr. Tedford. I don't think so.

Dr. Lamb of Los Angeles. I would like to ask the gentleman if the prevailing wind in Santa Ana is such that it carries the odor away from the town?

Mr. Tedford. No. The winds almost always come from that direction.

The Secretary. Did you notice any any odor at all coming from that direction?

Mr. Tedford. No. As I said a moment ago, if you go down on the place, you would not know it was a sewer farm unless you were told so. It is just as sweet as any other place.

Mr. Peters. Suppose a case of typhoid fever existed in your town, and the excrement was thrown into the sewer. Do you think the typhoid fever germs would have any effect on the milk produced by the alfalfa hay?

Mr. Tedford. You would have to give me time to answer that.

Mr. Peters. This is quite an important question.

Mr. Tedford. I am not an expert on the subject.

The President. Hollister can probably give us some information on the



subject. I will call upon Mr. Bolton.

Mr. E. E. Bolton of Hollister. In Hollister we are using about 40,000 gallons of water a day for flushing. In addition to that, the sewage is conveyed by gravity to about ten acres of ground. The land is creek bottom land, with a shallow soil of about three feet in depth, with a gravel base, which gives us an excellent sub-drainage. The water is applied by running it through shallow ditches, about 12 feet apart, and it percolates from one to the other. At frequent intervals this water is changed to other parts of the field, and the refuse matter which has not been absorbed by the soil is gathered up and hauled off—we use that as an orchard fertilizer. The productions of this farm are corn and alfalfa so far—we have been using it about a year and a half. The alfalfa produced several crops last year, and the corn, which we used as corn fodder, ran about 8 tons to the acre.

Mr. Turner. About how many miles of sewer have you?

Mr. Bolton. We have about twelve miles, I think, in the town, and about  $2\frac{1}{2}$  miles from the town to the land where the sewage is deposited.

Mr. Turner. You have about fifteen miles, and you use 40,000 gallons of water?

Mr. Bolton. Yes.

Mr. Morse. Is there any perceptible odor arising from the farm?

Mr. Bolton. Not any at all, and the farm lies west and our winds are always from the west.

The President. Is the farm within the corporate limits?

Mr. Bolton. No, it is  $2\frac{1}{2}$  miles away from the town.

The Secretary. Do you derive any revenue from the farm?

Mr. Bolton. We gave away the use of the water on a 25-year lease, so we derive no revenue from it whatever. But the people who are using it appreciate it, and find it a very profitable piece of land.

The Secretary. The city does not

own the farm, then?

Mr. Bolton. No, the town has nothing to do with it. The land is owned by an orchard company.

Mr. McKevitt. What system of flushing do you use?

Mr. Bolton. The Alameda, an automatic flush tank. We regulate them to flush commencing at one end of the sewer. For instance, it would flush at one end at 10 o'clock, and a little later on down the line the next one would dump, and so on, keeping a continuous stream washing through the pipe.

Mr. McKevitt. Where do you get the water that you use for flushing?

Mr. Bolton. We buy it from the water company, and pay 10 cents per 1000 gallons for it.

The President. Then you have no municipal water system there.

Mr. Bolton. No. We get it from a private corporation, and the water is brought in about 14 miles from the mountains. The question of municipal ownership was brought up a short time ago, but the price asked for the property was rather discouraging.

Mr. Devine. What do you pay for water for domestic use?

Mr. Bolton. The base is \$1 per family, and they charge extra for keeping a horse or cow. The water there is pumped considerable in these dry years but naturally they have plenty of water without pumping. Under our company's charter, we should have the water that we use for municipal purposes for nothing, but they charge us for it nevertheless.

The President. We will now hear from Mayor Turner of Merced.

Mr. Turner. As far as Merced is concerned, we have just fairly got our sewer system completed. Really it is not finished, but we have accepted it under conditions, and when I left a few days ago, the water had hardly got to the farm. I shall be glad to answer questions regarding the sewer system itself.

The President. What sort of a system is it?

Mr. Turner. It is a gravity system.

The President. How large a sewer arm have you?

Mr. Turner. 160 acres, and it is about miles from town.

The President. How many miles of sewer have you, and what sizes?

Mr. Turner. 16 miles of sewer, 6, 8, and 10 inches.

The President. Do you have flush tanks?

Mr. Turner. Yes. So far as the sewage farm is concerned, the sewage but just been turned upon it.

The President. And you have not had any chance for damage suits yet?

Mr. Turner. No. I think we will not have any, though. The land is not extra good land. It is hardpan underneath, and may require a good deal of stirring up to keep it in shape. We have no separate tank, but the people over in that neighborhood threatened a suit before we started in, if the wind blew the wrong way, and I told them that of course they could not realize against us until they could prove damage, but if they were going to start a suit, to start it right then and there, and the suit never has been started, and I guess never will be.

The President. Have you leased the farm, or does the town own it?

Mr. Turner. The town owns it.

The President. Does the town expect to run the farm itself?

Mr. Turner. We hardly know what we will do. While I am down here, I want to see what they grow on their farms here, and when I go back I will make some recommendation.

The President. How much water do you use for flushing?

Mr. Turner. We have not regulated that yet. That is one reason why I have been asking so particularly of these gentlemen about the amount of water they used. Our engineer figured up that 20,000 gallons a day would be sufficient for us to use. We have been a little fearful that he underestimated it. Before we started our works, we

had a committee go to Hollister and investigate their system. The committee came back and reported that everything was favorable, and that it worked well, but, as to the quantity of water, we hardly thought that they used 40,000 gallons.

Mr. Morse. Is the company that you receive your water from, an irrigation company or a domestic water system?

Mr. Turner. It is both irrigation and domestic. We are paying 10 cents a thousand gallons, as I said, and we have got to put meters on, as they are going to meter it to us and charge us at that rate. I told the engineer that if their price was too high, and if we used more water than we could stand, that we could very easily put up our own water works.

The President. Do you have artesian water there?

Mr. Turner. No, it does not come to the top of the ground. But by going a very few feet we can get water.

Mr. Heathman. I see the city engineer of Los Angeles here, and I would like to hear from him with regard to Los Angeles in this connection.

The President. We would like to hear from the gentleman upon the subject of "Disposal of Sewage by Irrigation," as to the Los Angeles farm.

Mr. H. Stafford, of Los Angeles. I do not think our system is a model to discuss, Mr. President.

The President. Will the representative from Santa Rosa tell us something about their experience in the purification by septic tanks? I observe that Mr. Keegan is not here, so I will state that when we were talking of a sewer system at Palo Alto, I visited Santa Rosa, and learned that they were sued a number of times and lost their suits there. I visited the farm, and I must confess it gave me the impression of a very badly managed institution. There was no bad odor about it, but the whole thing indicated lack of attention and system. I went away with the notion



that the sewer farm might be made a great deal better, but also with the idea that the suits were blackmail suits. At Palo Alto we had to vote three times before we could get a system at all. The first plan suggested was a sewer farm plan. The engineers investigated the bay shore and the currents there, and concluded that if we ran our sewage into the bay, the tides would carry the stuff south and north, and deposit it on the coast, near Redwood City, and other towns, and that we would have suits on our hands, and so they recommended the sewer farm plan. We had a good many discussions at our improvement clubs, and one of the professors at Stanford University described the sewer farm in language very much more elaborate than anything we have had here. After we had gotten all the information possible, the plan was submitted to a vote and defeated. The people would not have a sewer farm. Then we were going to put part of the expense on the property owners and part on the town, and they defeated that. The third time we put the entire expense on the town, and that carried. We voted \$40,000, and the system only cost us \$27,000, so the other \$13,000 went into the electric light plant. We have about 23 miles of sewers, the smallest being a 6-inch sewer. The flushing is done from our fire hydrants, and is done with a man and a hose. When our population increases, we expect to introduce flush tanks.

Mr. Ey. You say that you expended \$13,000 voted for a sewer system in an electric light plant? Did you have a legal right to use the \$13,000 for that purpose?

The President. Yes, and I will tell you the reason.

Mr. Ey. I ask because we have been criticised for using a surplus fund obtained from a bond issue for other purposes.

The President. We were criticised for that also. We investigated and found that the law under which the

bonds are issued states expressly that the money must be used for the purposes for which voted so far as necessary, and the balance may go into the general fund. And we used it out of the general fund for a lighting plant.

The Secretary. In order to correct a possible misapprehension in regard to the management of the Santa Rosa sewer farm, I will state, in the absence of Mr. Keegan, that the equipment and management of the sewer farm at Santa Rosa has been overhauled during the last few years, and it is now under almost perfect management. If Mr. Keegan were here he could doubtless explain the steps taken to improve the condition of their sewer farm and their septic tanks, and that their system is well nigh perfect.

Mr. Ey. Mr. President, what will you do at Palo Alto with the sewage finally?

The President. It runs into the bay now.

Mr. John C. Ing, of Sacramento. Mr. President, several of the gentlemen have talked about the flushing of sewers. I will state that we have recently had one of the best sewer experts in the United States formulate a plan for our city, for which we contemplate issuing bonds, the gentleman being Mr. Herring of New York. He recommended for us a system of self-flushing. He proposed to put at certain points, so far apart in the main sewer, a gate, and, by having a man attend these gates, a given gate would be shut down, and the sewer would be allowed to fill for a certain height for say three blocks. When it is filled to a certain height, the gate is raised, and all of the water is rushed down and flushes a certain part of the sewer, and then further on is another gate, which can be operated in the same way. That is a system that we now contemplate.

The President. That would not do in a town where houses are about 200 feet apart, would it?

Mr. Ing. This is a system for flush-

ing main sewers, of course. At the head of lateral sewers, he advises the automatic flush tanks. The plan he has outlined is a very complete one. It is something that he has had experience with in some of the Eastern States. If any of the gentlemen who are buying water to flush their sewers with care to look into the matter, the plans and specifications can be had, and we shall be glad to furnish them at any time.

### Roll of Towns.

NOTE. The last subject on the program of the convention was a roll call of towns and responses to the question: "What has your city done during the past year." This was very interesting and the remarks took a wide range. It has been impossible to give all that was said in this connection and space permits only the barest outline of progress made by the cities during the year.

ELSINORE. Mr. Traphegan. We have made some general progress during the last year in our little town. Perhaps the most important thing I can tell you is that we shall be very likely to join the League within the coming year.

HOLLISTER. Mr. Bolton. We have to report very little. We have built a new town jail, and extended our lighting system somewhat, and have more concrete crossings. I think that is about all during the last year. We are under process of a change from an old to a new charter, but have not yet got very far along with it.

SANTA ANA. Mr. Tedford. We have built quite a good many cement and asphaltum sidewalk crossings, extended our water mains, and graded and graveled our streets to quite an extent. I think that is about all that we have to report.

SAN JOSE. Mr. Macaulay. Under the late decision of the Supreme Court, whereby counties are enjoined from collecting licenses in the municipalities,

we have seen fit to increase the retail and wholesale liquor licenses, the former from \$20 to \$80 per quarter, and the latter from \$15 to \$22.50 per quarter, increasing our revenue about \$15,000 per annum. We are to have a new library, having prevailed on Mr. Carnegie to give us \$50,000 for the purpose, and that is well under way. We have succeeded in closing the gap between the fiscal year ending on July 1st. and the close of the year, so that we no longer have a deficit, but can pay cash for things as we go along; or at least, that will be fully accomplished by the end of this fiscal year.

SANTA CLARA. Mr. Mason. During the past year Santa Clara has completed its gas works, which are working very satisfactorily, as already reported. We have curbed and guttered the streets of the city, which quite improves the appearance of the town. The curbing is wooden.

STOCKTON. Mr. Catts. We have gone ahead quite rapidly during the past year, in the way of building macadam streets, as well as some bituminized blocks. In fact, there is a very healthy civic tone in Stockton, and we expect to move right along rapidly. Our total bill for street work for the year was \$74,450. We have built 236 feet of bulkhead along the river, which we count a permanent improvement, and have taken up another of the many squares left to our city from its being an old Spanish settlement.

VALLEJO. Mr. Lynch. We have graded 13 blocks, built 6110 feet of district sewer, with 6240 feet in laterals; put down 15 blocks of concrete sidewalk and about 25 blocks of wooden walks, as well as 4 blocks of bitumen walk; have finished our city wharf, now about 1600 feet long; and have installed 250 water meters in connection with our municipal water works.

MERCED. Mr. Turner. We have raised our liquor licenses from \$60 to \$260 a quarter, under the decision of the Supreme Court; have built a sewer



system that has cost us, in connection with the sewer farm, about \$43,000; have built some concrete walks, and have started a general improvement of our streets to make them of the highest.

OAKLAND. Mr. Boyer. So far as our charter will permit us, we are making very rapid progress in Oakland. We are now working upon a boulevard around Lake Merritt, which is something that the people have wanted for many years. A new Post Office is being built, which will be an excellent thing for the city. We are very much hampered by the charter limit, thinking that we might even have to close the public schools.

OCEANSIDE. Mr. Goetz. We have been making some progress during the past year, but expect to report still greater progress, especially in the direction of our water service, at the next convention.

PALO ALTO. Mr. Hutchinson. What we have accomplished during the past year has much of it already been given the convention. The progress made has been quite satisfactory, especially with our problems of municipal ownership, extensions having been made in the water works, and sewer system, and so on, to meet the growing demands. Sidewalks are being made rapidly. We have undertaken to bitumenize two blocks of our main street near the station.

PASADENA. Mr. C. J. Willett. Pasadena's improvement goes on steadily from year to year. During the past year matters of municipal improvement have occupied our attention, as to some of which the convention has already been informed. I only hope that we may be able to report as satisfactorily at the next convention,

PETALUMA. Mr. Walsh. The complete sewerage of the city has been going on rapidly during the past year, and other work has been done. But that in contemplation for the coming year is much greater, especially in the direction of macadamizing and pav-

ing with basalt blocks some 20 blocks of our streets.

RED BLUFF. Mr. Bransford. We have been grading our streets, and have practically finished our 12 miles of streets. We have established a public library, which is getting along nicely, and there is a great interest taken in it. Taking it all together, we are getting along very nicely.

REDLANDS. Mr. Fowler. We have voted bonds for a city fire department during the past year, though we failed in an attempt to get them for a municipal water system. We have graded probably 3 miles of streets, using oil on the surface, as you saw yesterday by an application to Bond Street.

REDWOOD. Mr. O. W. Dodge. We have entirely remodeled our old-fashioned arc light system, and put in an incandescent system, using 1600-candle power lights, which I will say gives us twice the satisfaction that our old 2000-candle power arc lights gave us. Our water works has been decidedly improved, there being some two or three miles of new main pipes, and the town has been put under the meter system. Sidewalks have been extended, and street work has been going on, and everything is progressing satisfactorily.

RIVERSIDE. Mr. Morse. We have completed our electric lighting system. We have put down considerable cement sidewalking.

SACRAMENTO. Considerable street work has been done during the past year. Tenth Street was improved at a cost of \$4500. \$3500 was expended in the improvement of Fourth Street and \$3500 in macadamizing 23d. Street. A large amount of sewer construction was had, costing in the neighborhood of \$20,000. An oil-burning outfit was installed at the water works, and many extensions made.

SAN BERNARDINO. Mr. Hanford. We built a new bridge at a cost of \$25,000, and are rebuilding another one, the cost of which we expect to share with the traction company, who, fortu-

nately for us, needed one at the same time. We have extended our water mains to a considerable extent, and everything is progressing in a generally satisfactory way.

SAN DIEGO. Mr. Frary. The grading of our city's streets is going steadily forward. We have during the past year completed the surveys of and laid out a chain of boulevard of about 40 miles in length, and have the plans and specifications to extend our systems of sewers, which has become inadequate. We expect to vote some \$300,000 or \$400,000 in improvement bonds during the coming year to go right ahead with all necessary work. Owing to the generosity of Mr. Carnegie, we have a fine \$60,000 public library now. Our fire department efficiency has been increased by the addition of a chemical engine and some steam engines, as well as hose carts. The most important thing in 1901 was the issuance of \$600,000 of bonds and the purchase of water works.

SAN LEANDRO. Mr. Hopper. We have continued the improvement of our sewer system, have put in some new fire apparatus, and macadamized a number of streets. I think we shall be able to make an even better report next year, as one of the things that we came here to find out was the best ways and means of making public improvements. After the education we have had here, we shall certainly be able to do better.

SAN MATEO. Mr. Kirkbride. We have not done very much in San Mateo during the past year, except to provide for future work by the voting of a bond issue for the construction of permanent bridges, concrete arch structures. I think our people are now educated up to the plan of bonding for permanent improvements, and that is a step forward. I hope we may be able to report soon that we own some of our public utilities, which we do not now.

SAN PEDRO. Dr. W. A. Weldon. We have spent some \$1500 in the improve-

ment of our fire system, and have improved the town by grading the streets and putting in new sidewalks. Everything is very stirring with us now, and the improvement will go along very rapidly, I feel sure.

SANTA BARBARA. Mr. Moyer. We last year voted \$60,000 for an extension of our water system, which is now nearly completed and have started the building of a new high school building, to cost \$60,000. Everything looks well with us, and I think municipal improvement will continue to be the order of the day.

SANTA CRUZ. Mr. Parker. During the last year we have instituted a pumping plant. A good deal of street work has been done, and a good many crossings have been built. We have also under consideration the acceptance of a proposition from Mr. Carnegie for a library building.

VACAVILLE. Mr. McKevitt. Last year over four-sevenths of the money that we raised went into the street improvements. We are macadamizing our streets, and making them just as good as we can, putting gravel on in places where the traffic is not so heavy, and, since I have seen in southern California what can be done with oiling roads, I do not know whether we will macadamize more or not, because it seems to me that we can make just as good a street with oil. Everything is moving along very satisfactorily, and we shall be able to report still greater progress at the next convention. We propose putting in a septic system, and so I shall be very glad to observe the result of their work at Santa Monica. There is one matter that I want to suggest. At Vacaville, a great many people come into town from a long distance in the summer time, men bringing their families there, and we have found it a great advantage to the town to have something going on there in the evening, when possible, and band concerts on Saturday evening have been adopted. The merchants contribute something



towards it and I can assure you that sometimes people come as far as 20 miles to listen to one of those concerts.

LOS ANGELES. Mr. Snyder. I have already told the convention about our voting \$2,000,000 in bonds for the purpose of taking over the water plant here, which will be accomplished now very soon. We have been making satisfactory progress otherwise along many lines, such as improving our parks. Our public library is one of the most neglected departments of our municipality.

### Tree Planting, Etc.

A PART OF THE PROCEEDINGS OF JAN. 10.

The President. The first subject on the program this morning is "The City Beautiful," and I will call upon Mr. Putnam, a member of the Tree Commission of Redlands, to tell us what he can about it.

Mr. Putnam. So far as our Commission is concerned, its powers are very limited. Any one who desires to cut down a tree must get the approval of the Commission. In setting out trees, the property owner may do as he chooses along the sidewalk, but approval is necessary if he desires to cut them down.

Mr. Snyder. Have you any law or ordinance that, if the parties along a street for, say, two or three blocks should petition your Board of Trustees to set out trees, you are permitted to force all property owners within these blocks to put in trees, say of a certain kind?

Mr. Putnam. We have no such ordinance. All such work is done at the expense of the individuals themselves. They put out any kind of tree they see fit, and do not have to ask permission. Neither is there any regulation as to the distances apart or location of trees.

The President. Who appoint the Commissioners?

Mr. Putnam. They are appointed

by the trustees, three Commissioners. As to their duties, they have never had any absolute authority, and they act without remuneration.

Mr. Morse. Do you not think, Mr. Putnam, that it would be wise for the Commission to have authority to direct the matter of planting and trimming trees, and their general care, from your experience in Redlands?

Mr. Putnam. I think the less authority the Commissioners have, the better. We have to depend on the individual interest of people to make a city beautiful; it cannot be done by town laws. The owners have to furnish the water for the trees, and the trees, and they set them out, and it is my judgment that if you undertook to regulate the matter by law in the particulars suggested, personal interest would be destroyed. If the town were to do the work at its own expense, that would be a different question. Under our present system, Redlands is very well kept in this connection, and we depend entirely upon education and example, which strikes me as being vastly more effective than any law. To illustrate the matter, you cannot compel a man to water his trees, and he may let them die if he wants to. Moreover, he can prune them as he wants to. And we find that this plan works very well indeed.

Mr. Turner. Do you allow telephone and telegraph companies to go through the trees and lop them off as they please?

Mr. Putnam. Yes, they are allowed to go through them. The Tree Commissioners have nothing to do with that, however.

The President. Does your Board of Commissioners hold meetings?

Mr. Putnam. No. We simply get together and consider each individual case. If a man wants to cut down a tree, he applies to the trustees, who refer to the Commissioners, and the Commissioners report back to the trustees.

Mr. Macaulay. Do you not think it would be better if the Commission were

clothed with power to distribute the distance between trees, and regulate the trimming of them and the style of tree to be planted?

Mr. Putnam. No. I do not believe in uniformity in a town, and moreover, I think that the owner of the property should be permitted to do very much as he likes in that particular. I find that they will always listen to advice, and the Tree Commissioners will give advice whenever it is sought. It follows, of course, that the powers of the Commission to which I belong are very limited.

The President. Have your trees interfered with your sewer system in any way?

Mr. Putnam. Not at all.

Mr. Morse. Your committee is really an advisory committee to the Board of Trustees, in which they refer to you rather than trust their own judgment?

Mr. Putnam. It saves them trouble, and divides the work. I will say that I think we make a mistake here in having evergreen trees entirely. I think deciduous trees are better. That, however, would not please the tourist as well. But I think that we ought to have outgrown the tourist idea, and that we ought to do things to please ourselves.

The President. I believe Mr. Fowler was a member of the Commission when it was created. Do you remember how it was created?

Mr. William Fowler, of Redlands. I will state that a good many trees were set out at a very early day on one of the sidewalks, and when some of our later residents came along, they wanted to pull them out indiscriminately. We found that it was disfiguring the city, and in the residence part of the town they were finding fault with us, and upon their suggestion, I think really upon Mr. Smiley's suggestion, he being one of the original Commissioners, the Commission was appointed. We had a suit at one time upon the subject of the city trimming the trees, and that was

decided against us.

The President. That you had no right, to trim the trees?

Mr. Fowler. Yes.

The President. Do you remember upon what theory that was decided.

Mr. Fowler. Upon the theory that the trees were private property.

The President. And that the public merely had an easement in the sidewalk and road?

Mr. Fowler. Yes. I will say that since this Commission has been appointed, everything seems to have gone amicably. The people are satisfied, and we are happy, and there is very little trouble about it.

The President. How often do you have to refer a question of that kind to the Commission?

Mr. Fowler. Oh, perhaps once or twice a month. We allow any one to take up a dead tree, however.

Mr. L. V. W. Brown of Riverside. What policy do you follow in regard to the trees where you have a fine row of them on the street and they interfere with the orange trees? In such case, do you allow the owners to take them out?

Mr. Fowler. It is a serious question whether we should compel a man to keep trees on the sidewalk when they interfere with his orchard. We never have allowed a tree to be taken up for that reason, because we think the tree improves the value of the property more than it hurts the oranges. But we cannot prevent the owner from trimming the tree down, and cutting the roots on the orchard side.

Mr. Morse. Do you mean to say that you cannot prevent a man from trimming the top of his tree down in any way?

Mr. Fowler. No, you cannot. He can cut off all of the branches and all of the roots on the orchard side, for instance, so that he can practically kill it, and we cannot prevent him. I believe it was settled by court that we have no authority as to pruning.



Mr. Morse. We prevent it in Riverside.

Mr. Fowler. Suppose a man does not water his trees. They will then look worse than no trees at all. But you cannot compel him to water them. In our part of the the country a tree does not grow without water.

The President. You had no natural trees growing in the roads?

Mr. Fowler. Nothing but sage-brush.

Mr. W. L. Peters of Riverside. Have you any people who want to cut down trees for the purpose of getting wood?

Mr. Fowler. Not on the sidewalk. At least, I never heard of it.

Mr. Peters. That is one of our obstacles at Riverside, and that one of the main reasons that we have wanted a Tree Commission appointed.

Mr. C. R. Stibbins of Riverside. Do you ever have a request for the removal of ornamental trees for the purpose of setting orange trees, and do you permit it?

Mr. Fowler. I don't think we have ever had such a one.

Mr. C. S. Traphegan of Elsinor. How do you handle the telephone companies?

Mr. Fowler. We let them trim out the tops of the trees.

The President. Do they not apply for permission to do that?

Mr. Fowler. The trustees do not grant the corporation any power. If the telephone company does it, we say to the property owner, "You can defend yourself."

Mr. Snyder. I think that you should have it so arranged that you grant a franchise, and it can be regulated in the franchise.

Mr. Hanford. I can tell you something of how we dispose of matters of this kind. Quite recently a number of prominent ladies of our town connected with churches and other charitable institutions, formed what they call a Civic League, and then sent invitations to all the prominent organizations of

the town, and Board of Trustees, Chamber of Commerce, Board of Health, and so on, to send delegates to their meetings. After doing good educational work, they came before the Board and wanted to encourage the matter of tree planting as much as possible, and look to its regulation. I suggested to them that they take the matter into the public schools and reinstate Arbor Day on the first of May.

The President. The chief object there was to get more trees planted.

Mr. Hanford. That is one of the main the objects, of course, and we have been getting along very well. With regard to the telephone companies, we have found that they will come along, and, without asking your leave, cut the whole top of a tree off, if they saw fit. Our people made such protest against it that the Board of Trustees made an ordinance prohibiting it. And now we hold that a telephone or any other company, whether it has a franchise or not, has no business to touch a tree without first notifying the city. In fact, they do not touch them at all. We insert a clause in every franchise that we grant that the work of trimming trees must be placed under the supervision of the trustees of the city, or the Street Superintendent, to whom the whole matter is turned over, the companying the expense. And another ordinance states that the trees shall not be trimmed out over two feet from the wires.

Mr. William Niles of Los Angeles. As a matter of information, Mr. President, I will say that the matter of trimming shade trees is here prevented by city laws. Electric or telephone companies have no right to touch a tree planted along the highway, whether within the municipal limits, or along a county road. I have tested the matter in the courts, and do telephone or electric company touches my trees without my special permission.

Mr. Peters. Does it require individual permission, or the permission of the municipality?

Mr. Niles. If the property owner insists upon it, it requires his individual permission.

Mr. Morse. There is no question about the State law there; that I know to be the fact.

The President. That has been in force in San Mateo County and Santa Clara County for some time.

Mr. Morse. I think perhaps that would not apply under certain conditions. If I understand the law right, where a road has been deeded to the public generally, it has come into the control of the city or county. But while the city and county have the control of the road, they do not have the control of the trees planted along the sidewalk.

The President. The fee title is in the owners.

Mr. Morse. Yes. But you take it in the cities where the streets have been dedicated to the public use by a map filed showing those streets, then the city has absolute control over them from property line to property line. We take that position in our city, and we have passed an ordinance so that no individual can cut out a tree in front of his place without the consent of the Board of Trustees. We have the same thing that Redlands has in the shape of an Ornamentation Committee, but it is simply advisory. If they advise the action, we grant it, because they have visited it and know the conditions. Frequently trees are too thick. Take pepper trees, for instance; 40 to 50 feet apart is as near as they ought to be, after they get to be 15 or 20 years old. Moreover, if a man trims a tree down to a stump with us, we take him up to the police court and he pays \$20 for his education. We have covered that by an ordinance, and we can do it. In the absence of an ordinance, however, I think the individual can beat the town, and that is the point that must be looked out for. The matter has been spoken of about spending money in regard to trees. In our city, we have in the Street Superintendent's Report items showing

that he spent, in pruning and cultivating: For labor, \$527.20; team work, \$138.75; for irrigation and cultivation, \$73.85; a total of \$739.80 for the last year. We do sometimes set out trees when we find that it is required, and we have sometimes ordered some of them cut out.

Mr. Hopper. The gentleman says that there is a State law in this connection, Mr. President. We had a little touch of that up our way recently, when the Standard Electric Light Company went through our town. They went down the county road, and a gentleman there who has a nice place made them pass across the street, and would not allow them to cut out the trees. That of course was without the city limits. Within the city limits we have an ordinance to prohibit anybody from cutting down trees on the sidewalk, and our trees are trimmed at the institution of the Street Superintendent. We do not allow anybody to trim a tree unless under his supervision, and we have no trouble whatever in the matter.

The President. That is the Palo Alto plan, and it is very successfully enforced.



### Brief Library Notes.

Pomona has abandoned the system of annual dues and it now supports a free library. The result is added popularity and an increased public interest in the institution.

The corner stone of the Carnegie Library at San Jose was laid on the 16th inst. with imposing ceremonies by the local organization of Elks.

The plans and specifications of the new library at Alameda are nearly ready and bids for the construction will soon be advertised for.

A summer school of library science is to be a novel feature of the next summer session of the University of California from June 26th to Aug. 6th.

Santa Cruz Free Library contains two and one-third books for each man, woman and child in the city, and the circulation averages eight volumes per capita each year. Sixty-six volumes out of each hundred issued is fiction. This percentage would be much less if a record was kept of the books used in the library.



## What the Cities are Doing

Gilroy will improve its street lighting service.

Los Angeles has prohibited bull fights within the city limits.

San Rafael will install a salt water sprinkling plant for street purposes.

Selma is preparing for a bond issue for a sewer system to cost \$22,000.

Bakersfield is agitating the matter of public improvements the cost of which may aggregate \$100,000.

After being in the courts for several years the electric lighting bonds issued by San Leandro have been declared to be legal.

Woodland provides an "all night" saloon license on payment of \$5.00. Without this license saloons must close at midnight.

There will be no bond issue at Healdsburg for light extensions, the preliminary resolution having been defeated by a vote of two of the trustees.

The electric lighting company supplying Berkeley has voluntarily reduced the cost of lights to the city by 25 cents per month per lamp. This will save the city about \$1000 annually.

Santa Monica has voted to become a city of the fifth class by nearly 7 to 1 vote. Just before the election the trustees had a census had taken, which showed the city as having less than 3000 inhabitants, so there is a question as to whether the reorganization is legal. At the last U. S. census the city had a population of over 3000.

Los Angeles has at last come into the possession of its water system. The bonds have been sold the proceeds received out the sum paid to the water company. Actual possession is with the gas officials. A board of water commissioners has been appointed consisting of Herman Silver, Jas. C. Kays, Chas. H. Toll, Frank W. King, L. A. Grant, J. M. Elliot and H. T. Lee. Civil service rules will govern the management of the system.

## Personals.

E. Manesse and Jas. B. Newman are newly elected councilmen of Napa.

Wm. Ruwe has been appointed a trustee of Yreka.

Joseph Hutchinson and J. S. Butler have resigned as trustees of Palo Alto and Burke Corbet and J. N. Fuller have been chosen as their successors.

R. R. Tanner has resigned as city attorney of Santa Monica.

## Notice of Sale of Bonds.

Sealed proposals will be received until MAR. 3, 1902, at 6 o'clock P. M. by the City Council of the City of Eureka, Calif., for \$30,000, 4½ % School bonds, and \$85,000, 4½ % Sewer bonds. They will be in denomination as follows.

School bonds \$375.00; Sewer bonds \$708.33½, dated on or after April 1, 1902. Principle and interest payable at the office of the City Treasurer of the City of Eureka, Calif., Interest payable semi-annually, 1-40 of the principle payable annually, all in United States gold coin.

All bids must be accompanied by a certified check for 5 % of the bid payable to the Mayor of the City of Eureka. State of California.

The City of Eureka contains a population of, approximately, 10,000, assessed valuation \$4,000,000, with no bonded indebtedness.

Bonds issued under the Act of February 25, 1901.

J. P. WUNDERLICH, City Clerk.

## To All Who Want Anything.

If you want prices or information on anything, write to us and we will promptly put you in the way of getting it without charge.

## California Municipalities

Room 14, Eighth Floor, Mills Building,  
SAN FRANCISCO.

SAN FRANCISCO  
PUBLIC LIBRARY

# CALIFORNIA MUNICIPALITIES

VOL. 6.

MARCH, 1902.

NO. 2.



BEACH AND BOULEVARD, SANTA BARBARA.

SAN FRANCISCO OFFICE . . . . .  
ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.



TELEPHONE MAIN 771.

INCORPORATED JAN. 11, 1889

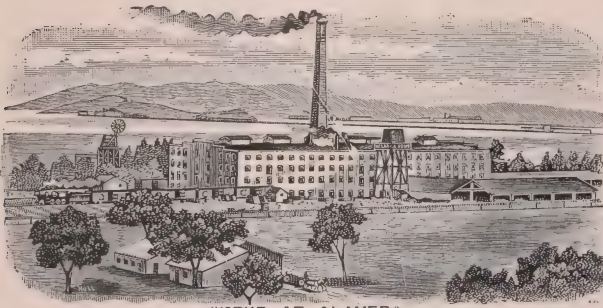
N. CLARK and SONS,

MANUFACTURERS OF

Sewer Pipe, Chimney Pipe,  
Caps & Tops, Architectural  
Terra Cotta, Hollow Tile Fire  
Proofing, Pressed Brick, Fire  
Brick, Tile, etc.

Office 17 & 19 Spear St.

San Francisco.



WORKS AT ALAMEDA

TELEPHONE SOUTH, 90.

# STEIGER TERRA COTTA & POTTERY WORKS.

MANUFACTURERS OF  
HOLLOW TILE FIRE PROOFING,  
SALT GLAZED SEWER PIPE, PRESSED BRICK,  
ARCHITECTURAL TERRA COTTA,  
HOLLOW BRICK, PAVING BRICK, DRAIN TILE,  
CHIMNEY PIPE & TOPS, FLOWER POTS ETC.

**FIRE BRICK**

W E DENNISON  
PRESIDENT  
J. W. McDONALD, JR.  
SECRETARY  
L. A. STEIGER,  
MANAGER.

Office and Yard: 1556 to 1564 MARKET ST.  
and 127 To 131 CITY HALL AVENUE.

Works:  
SOUTH SAN FRANCISCO  
SAN MATEO CO.

SAN FRANCISCO, CAL.

J. P. K. OTIS,  
President & Manager.

EDW. P. KING,  
Treasurer & Supt.

UNION WATER METER CO.

WATER

Worcester, Mass.

METERS

Union Rotary Piston and Columbia Patterns

Pacific Coast Agent: - - G. FRANK OTIS, 349 Waldo Ave., Pasadena, Cal.

38 SPECIAL—32 WINCHESTER

Smith & Wesson's Latest  
The Military & Police Revolver

Perfect Workmanship — Accurate — Reliable —

Adopted by Police Forces—Recommended by U. S. Government  
Inspectors. Catalogue on application to

**SMITH & WESSON, Springfield, Mass.**

San Francisco Branch, 114 Second St.



# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 6. March, 1902. No. 2

## California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.

Office of Publication, - SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

All persons interested in the study of municipal problems, members of local improvement clubs and other civic organizations, ought to be subscribers to this magazine. It is the only publication of the kind on the Pacific Coast.

Send for sample copy.



### CONTENTS.

#### EDITORIAL.

Notes .....	51
Papers and Discussions on City Charters..	53
Dual Legislative Bodies .....	54
Charters of Small Municipalities .....	56
Hints on Municipal Government .....	68
Suggestions to Charter Makers.....	70
General Discussion .....	76
What the Cities Are Doing.....	80
Library Notes .....	81

With the recent rains, water ought to be cheap this year.



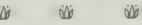
Winters has completed its water system, thereby increasing the number of municipal water works in the state to thirty-three.



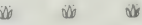
Good municipal government can only be secured by educating the people to a realization of the advantages to be secured thereby.



What city will change its method of buying street lights from the lamp measurement to the meter measurement. It is the only rational system.



Andrew Carnegie presented ten cities in this state with public library buildings during the past year. At that rate of giving every town in the state that has a public library will have a house for it in five years.



Very soon the Legislative Committee of the League will send out to city officials request for suggestions as to what new laws should be sought for from the next legislature. Be prepared to make wise suggestions.



Should Assembly Constitutional Amendment No. 28 be adopted there will be no municipal water works, electric light works, or gas works in California. The supplying of the commodities, water, gas and electricity will be vested in a state commission, appointed by the Governor.



Municipal elections in the sixth class cities are due to occur next month and for once no new problems will arise in connection therewith. The last legislature considerably did not make any material changes in the election law. That frightful ballot, therefore, remains.



The publication of the proceedings of the Los Angeles Convention is completed in this number, the concluding subject being that of "city charters." While somewhat of a "dry" nature, yet the subject is very important, especially at this time when many of our municipalities contemplate framing new charters or contemplate making radical amendments to the old ones. Anything that will throw light on the puzzling questions relating to city charters is extremely valuable.



The city of Alameda has practically abolished the flat rate system of charging for electric lights and hereafter the meter system will be the basis for all services of this kind. This is undoubtedly an act of wisdom. It has been the experience of nearly all electric lighting companies, both municipal and private, that flat rates do not pay. A man who pays seventy-five cents a month for an electric light is very apt to let it burn all the time, whereas if he pays meter rates he will burn it only as he needs the light. Alameda's plant is being conducted in an improved manner and will eventually rank as one of the best managed municipal systems in the country.

The news comes that the famous suit of certain bondholders against the city of Santa Cruz has been decided adversely to the city by the United States Supreme Court. The bonds in question are those that were those those which were entrusted to the firm of Coffin & Stanton to be sold for the city, and which the aforesaid hypothesized on their own private account, the city not receiving one dollar of the proceeds. The bonds and interest amount to over half a million of dollars. It is a heavy blow to the city, but no one who knows the grit and energy of the citizens of the city will doubt but that in the end the matter will come out all right. In regard to the decision of the Supreme Court, the full effect is not yet known. There are some of the bonds that are outlawed, together with a part of the interest, and the plaintiffs in the action will not recover all that they sued for. But the decision is adverse to the city on the main proposition. The court holds that the city is estopped from asserting that it had no authority to issue the bonds, by the recitals therein. That is to say, the recital in the bond that it is issued regularly and with proper authority is conclusive when the bond is in the hand of innocent purchasers. This is an extreme position which no court has ever before taken, and is certainly dangerous to the safety of the people who reside in municipalities. The constitutional safeguards in respect to the creating of indebtedness may be absolutely and totally disregarded, yet if the bond recites that all steps have been regularly taken, even though the city may not be authorized to incur any indebtedness, yet the bond is valid. Dishonest officials then could secretly issue bonds, recite that they were regular, etc., sell them and pocket the proceeds and the citizens would have to pay. The decision that would permit such an imposition will certainly be interesting and next month we will endeavor to publish it as fully as possible.

—PROCEEDINGS OF THE—  
**Fourth Annual Convention**  
 —OF THE—  
 LEAGUE OF CALIFORNIA MUNICIPALITIES.

*Continued From Last Month.*

PAPERS AND DISCUSSIONS ON CITY CHARTERS.

BEING THE PROCEEDINGS OF THURSDAY EVENING, JAN. 9 TH.

**Government by Commissions.**

BY J. W. MACAULY, COUNCILMAN OF  
 SAN JOSE, CAL.

This is a subject requiring much thought and study—in fact one that should have the attention of a person particularly schooled in the science of Municipal Government. Notwithstanding this fact, we may be pardoned if we present our own views to this distinguished body, representing, as it does, every City of any importance, in California.

As I understand it, "Commissions" are created to better conduct public affairs—that is, the theory that a greater number of persons, skilled in each of their offices, can do better work and give more satisfaction to the general public, than a smaller number.

This may be usually considered sound logic; it certainly looks reasonable; it really is nice to say that, "the Police and Fire Commissioners are looking into the delinquencies of Chief Doe;" and that "the Park Commissioners are contemplating the purchase of that beautiful tract for a park;" or the "Board of Public Works are preparing estimates" for this or that improvement. So down the line with all the commissions, which the fertile brain of man can invent.

As I have said before, it is really nice for cities to have all these commis-

sions, for the average citizen, who takes any interest at all in affairs public, can swell his chest with pride and remark that it seems "quite metropolitan." Let us look into the matter in detail, and then let us turn over in our minds, whether or not, commissions, as created at the present time, are just what they appear to be.

The tendency of modern charters is to centralize power in the Mayor and then to hold him responsible for the condition of affairs. Many charters provide that the Mayor be paid an increased salary on account of his increased responsibilities, and that all commissioners shall be appointed solely by him.

The mayor has been elected, and then his troubles begin—the eternal scramble for places of honor and emolument is upon him.

The average Mayor is made much after the fashion we are. He wants and is entitled to his peace of mind. We, who have never been elected a Mayor, with a lot of commissions to fill, can hardly appreciate the magnitude of the undertaking. It is reasonable to suppose that you will pretty nearly agree with us, that the lot of a newly elected Mayor is not an enviable one—at least that is about the experience of Mayors in chartered cities with the usual commissions.

The appointments are all made and the press and public are or are not sat-



ified. The appointees may be all good men when selected by the Mayor, but sometimes men change their minds when they are temporarily clothed with authority, knowing full well that they are not answerable to the public, (whose servants they are) but to the Mayor (whose appointees they are).

Our opinion is that commissions appointed by the Mayor, are too far removed from the public. If it is found necessary to have commissions for the administration of municipal affairs, then by all means let the people elect them. The average man will respect public opinion much more when elected than when appointed.

The Mayor cannot control his appointees when they are in office, but at the same time, the Mayor is held responsible by the public for his commissioner's acts. It is true, he may have the veto power, but this is not an absolute check on the commissioners' acts. It does not seem quite right to us, to hold the Mayor responsible for things he cannot control.

In our beautiful city, San Jose by name, nestled in the Santa Clara Valley, midst sunshine, fruit and flowers, we are governed by a charter, adopted by the people about five years ago. In many respects it is a model charter; there are some objectionable features incorporated, but they have no place in this paper.

By its provisions, we have 5 commissions—Police and Fire—Park—School—Library and Health—having 5 members to each one. These, in addition to the Council of 5, make up the list, which the charter considers necessary to govern 23000 persons.

30 people to conduct the municipal affairs of a City of the 3rd class looks rather unwieldly.

The council apportions the tax money to the various commissions—but one apportioned, it has not the slightest control over the funds. At the same time the Council is held responsible if the funds are not used to the best ad-

vantage. This certainly is not right.

While the commissions do not ordain under our charter, still they are privileged to adopt rules, regulations and orders which practically amount to the same thing, thus creating a conflict with the Council, which is sometimes quite confusing and embarrassing.

Quoting from Goodnow's "Municipal Problems" wherein the relations of the Council and the Boards is touched upon, we find this: "There are many powers connected both with the determination of municipal policy and the carrying out continuously of that policy, when once determined upon, which are of a legislative character, which, in other words, resemble powers that throughout our entire system of government, are entrusted to that deliberative body—the Council.

So long as we retain our present ideas of government, they will never be entrusted to administrative offices or boards composed merely of individuals who do not owe their election to the people, who, in other words are not representative of the municipality."

We wish to say that our remarks probably should apply to cities of the 3rd class and smaller. We fully realize that large cities must necessarily have more or less boards, but we also fully realize and believe that the average board is too far removed from the people.

Our boards in San Jose appear to work smoothly, as far as the working of the different boards is concerned, but we are satisfied that the system is much more expensive than under the plan whereby the Council directs affairs.



### Dual Legislative Bodies.

BY FRANK P. FRARY, MAYOR OF SAN DIEGO.

The Freeholders charter of the City of San Diego was adopted March 16, 1889. It has proved very satisfactory

and has had but few amendments.

The city council has appointed committees on charter amendments, but their recommendations seldom get beyond the Common Council.

The Charter provides that the legislative power shall be vested in two houses of legislation, designated the "Common Council," consisting of a Board of Aldermen and a Board of Delegates. The Board of Aldermen is composed of nine members elected from the city at large, and the Board of Delegates of eighteen members, elected two from each of the city's nine wards, by the qualified electors of their respective wards. The Aldermen hold office for four years and are so classed that the term of office of not more than five expire at the same time. The Delegates hold office for two years only.

The Boards meet in separate chambers, and each elects a president annually for its own members. An ordinance or other business, or measure, may originate in either Board, and when it shall have passed one Board, may be passed, amended or rejected in the other.

Every ordinance, after it has passed the two Boards, and has been authenticated by the signatures of the two presidents is presented to the Mayor for approval or rejection. It requires the affirmative vote of  $\frac{2}{3}$  of the members of each house, to pass a measure over the Mayor's veto.

The Mayor appoints one or two members (according to the expiration of their terms) of each of the following boards:

Board of Public Works,  
 " " Fire Commissioners,  
 " " Police,  
 " " Health,  
 " " Cemetery Commissions.

The Mayor also appoints the City Auditor and Assessor.

The several executive Boards and officers appointed by the Mayor, are subject to confirmation of the Board of Delegates.

Dual Legislative bodies have their defenders as well as objectors, the same as all forms of government. Electing the members of one house from the municipality at large, meets the approval of those who desire to eliminate sectional feeling and vote-trading of one section, for the benefit of another, and electing the members of the other house from the wards, meets the approval of those who think their local neighborhood must be represented by their local man, to share in municipal favors.

We have, therefore, apparently adopted a plan, which meets the approval of the greatest number of citizens.

Twenty seven legislators, appears, at first glance, an unusually large body to legislate for a city of only 20,000 inhabitants, but so long as they serve without pay, the tax payers should not complain on that score; and legislation is seldom retarded on account of the size of the two houses.

In legislative bodies, whose members are all elected by wards, there is more or less of sectional strife and selfishness. A member from an outlying ward, for instance, will make demands for the most unnecessary expenditures of public money in his ward for no other visible reason, than otherwise his part of the town will not be "getting its share." His unjust demands are often successful for the reason that his vote is required by other members of the body, who are willing to yield to him rather than lose his vote for their measure—and thus electric lights are put up which benefit the jack rabbit and coyote alone; streets are graded, soon to be overgrown with grass and weeds; and fire hydrants placed blocks distant from any building.

With two houses of legislation, one elected from the city at large, this practice of wardism is overcome.

On the other hand, in legislative bodies whose members are all elected from the municipality at large, often times the majority of members come from the same district or class, and form a combination to stand together on all



measures, proceeding as if they were responsible to no one for their actions. That is to say in a legislative body elected wholly at large, the members do not feel the individual responsibility to their constituents as if elected by wards or precincts.

Before closing, I should like to bring to your notice, what we consider to be one of the strongest and best features of the Charter, namely:

The system by which bills against the city are contracted, audited and paid. Nothing can be purchased for the city without a requisition from the Board of Public Works. All bills are sworn to before the Auditor with requisition attached. After segregating the bills the Auditor sends them to their respective departments or commissioners who approve the same. They are then brought before the Board of Public Works. If approved, they come before the Auditing Committee consisting of the Mayor, City Attorney, City Auditor, President of Board of Aldermen, and President of Board of Delegates, and if satisfactory, the Auditor is directed to draw a warrant on the City Treasurer for the amount. Under this system it is next to impossible for any illegal charge against the city to be allowed.



### Charters of Small Municipalities.

Read before the Fourth Annual Convention of the League of California Municipalities, Los Angeles, Cal., January 8, 1902, by Charles N. Kirkbride, City Attorney, San Mateo, Cal.

A charter is a statement of the powers which a municipal corporation may exercise, and of the means and manner of exercising those powers. It is granted by the sovereign authority.

In California we have municipalities governed by special legislative charters, by freeholders' charters ratified by the people and approved by the legislature, and by charters found in the general incorporation law and duly adopted by the people in accordance therewith—

three kinds in all. The latter act in terms provides a system of government for all municipalities irrespective of size, but is found to be operative in only the fifth and sixth classes, those having a population not exceeding 10,000.

Prior to the constitution of 1879 our cities were created and governed by special acts, and so far as the form of government goes were subject to the evils and mistakes which legislation by means of special acts always engenders and displays. The new constitution following the lead of many other states, which had suffered through special legislation and endeavored to abolish it, placed many restrictions upon the passage of special acts. In most other states ways have been found of evading such constitutional inhibitions, but in California the theory of making laws general has been measurably followed with respect to cities. In that kindred governmental agency, the county, it has been found possible to provide, so far as salaries are concerned, a different law for every county.

The principle of classification has been applied to municipalities also and they have been divided into six classes according to population. The last legislature increased the number to seven by changing the first class into two classes, the first and first and a half classes. In Ohio they have fifteen classes and the evils growing out of the making of different laws for each of them have been pronounced intolerable. In the Municipal Code recently prepared in that state under legislative authority, though not adopted, the number was reduced to two, namely, cities and villages. Even this division has been criticised and in the Municipal Program hereinafter referred to all municipalities are treated alike.

Municipal home rule is one of the latter day demands. Disgusted with the meddling of legislators in local matters, the people have cried out against legislative interference of any kind.

St. Louis first obtained the right to frame its own charter. This was in 1875. Other cities were granted the same constitutional privilege and it has been said that this privilege changed the cities which it affected into little independent republics, so far as the things were concerned in which the state as a whole was not interested. California, Washington and Minnesota have followed the Missouri plan.

In this state any municipality of over 3500 population may frame its own charter, and as the result of a recent constitutional amendment may by that charter render itself much more independent than the Missouri republics referred to, for there the cities were subject to general laws, while here such cities are not even affected by general laws relating to municipal affairs. (Const. Art. 11 Sec. 6.) During the last few years a popular demand for new charters has been noted, not only in this state but elsewhere, and many of our California cities have availed themselves of the privilege of obtaining new freeholders' charters, while some others have abandoned their old special legislative charters and reincorporated under the general law.

With respect to the freeholders' charters of the smaller municipalities, it is to be noted that on principle one might expect to find in them many of the mistakes found in the early special legislative charters. They are invariably drafted in a hurried manner, the constitution allowing but 90 days for the work. The freeholders are local residents, 15 in number, and though doubtless familiar with local conditions are prone to be men without legislative experience or extended knowledge or special education concerning municipal questions. They therefore come to their task not knowing what has been the effect of specific provisions in other municipalities. As a result they are apt to take their own charter, compare it with some other one of which they know and then after compromises on

all sides, produce an instrument not satisfactory to anyone of them and more unsatisfactory to students of civics. Another difficulty which the model charter would have to meet before such a body of freeholders, would be one with which lawyers who conduct trials before juries are familiar. It usually happens that in groups of a dozen or 15 men there will be one or more dominating personalities. One strong willed man will sway a jury. Why not a Board of Freeholders?

Again, it is usually found that the call for a new charter becomes most pronounced about the time the rule of some certain "boss" and his "gang" is largely in evidence. A strong desire is felt to rid the city of the incubus, and the cry of "a new charter" is raised as the only sure way of annihilating the "boss" and turning his rascals out. What is the result? Perhaps the "boss" is exercising his control through the medium of his ownership of the city council. The freeholders looking at the situation from their local view point very naturally jump to the conclusion that the perfect charter is one which would do away with the "boss;" and the way to do away with the "boss" is to divest the "city council," which is and presumably will continue to be his creature, of some of its functions. They therefore limit the authority of the council and give the Mayor complete control, arguing that the people will then be sure to elect a good Mayor. He will be held responsible for good or bad government; there will be no opportunity for giving excuses, no divided responsibility; no misleading of the voter by a blanket ballot containing a multiplicity of offices to be filled, and good government will be the sure result. Very well. Your humble servant the "boss" accepts the new charter, and immediately lays his pipes to control the Mayor. The people rejoice exceedingly at the adoption of the new charter, have some big talks and speeches, and flatter themselves that



municipal misrule has been given a body blow. They therefore become somnolent and prefer a warm fire to the inclemencies of out of door with the effect that the council turns up a mixture of goody-goody and totally bad, and the "boss" is snugly ensconced in the rear of the Mayor's throne. So the misrule continues and the cry soon goes forth for more tinkering with the charter.

It is not enough to rely entirely on a strong executive for good government. Edwin Burritt Smith, Vice President of the Municipal Voters League, of Chicago voices, this thought in an article in "Municipal Affairs" as follows: "We have too long sought relief from municipal misrule by increased reliance on executive authority. There has been a tendency to rely less on the council, seek a temporary refuge in the executive, and make the final stand in the courts. This retreat has been marked by various efforts to cripple the legislative authority before leaving it to the control of special interests. The authority taken from the council has been given to the executive. The powers of the Mayor have been increased and new executive commissions and boards created. This policy has but whetted the insatiable appetite of the forces to which the council has been abandoned. In the pursuit thus invited, they have already acquired undue influence in executive chambers, and signs are not wanting of their purpose to add the courts to their possessions."

Mr. Smith points out how a reasonably decent council has been obtained in Chicago through the efforts of the Voter's League, a voluntary association of citizens which nominates no candidates, conducts no elections and has no direct power, its main work being the gathering of accurate information about candidates and making this information public. The result has been that the parties have been careful to nominate a better class of men, and inefficient councilmen are usually retired.

The moral of which is that local evils to

be eradicated do not always need alterations in the organic law. Furthermore it will be frequently found that such evils cannot be eradicated by such alterations.

The experience in Chicago, reinforced by the magnificent results accomplished in San Francisco by the Merchant's Association, have convinced the writer that the principal need to secure good government is an awakened civic conscience, an aroused public opinion, which will not only place good men in office but assist them in doing their duty. The often quoted lines of Pope have a large element of truth in them:

"For forms of government let fools contest—

What e'er is best administered is best."

Charters are the constitutions of municipalities and, like constitutions generally, should be devoted to the government of conditions generally—local conditions if you insist, but still local conditions generally. It is a mistake to attempt the reform of an evil due to personal causes by changes in the organic law. Such laws can do no more than afford a vehicle for the placing of good men in office. However stringent may be the definition of the official duties, unless the officer is earnestly desirous of performing those duties and has the force of an awakened and persistent public opinion to spur him on, he will drift into habits of slothfulness and afford the opportunity for the political cormorant to obtain his prey.

Nevertheless Pope's lines tho perhaps not striking a false note still do not sound the full chord. Tho that may be best administered which is best, we would not ordinarily look for the best administration in a false form of government. And in governmental problems as in insurance matters the law of probabilities applies. A charter will not insure good municipal rule. At the most it can but increase the chances of

obtaining good management. On the contrary a bad form of government will increase the opportunities of bad administration, tho susceptible of permitting the contrary in honest hands.

Good government will finally come when the people have reached the proper stage of civic education, and are not only willing to, but will, give the proper attention to public matters. Public opinion is one of the principal factors.

Professor Delos F. Wilcox in a paper read before the Good Government Conference in 1899 divides the fundamental evils in the government of our cities into three classes.

1. Economic Evils, in other words waste,—due to useless offices and inefficient officers, the payment of high prices, and on fruitless ventures.

2. Political Evils—It appears to me a better term might be used to cover the matters intended to be embraced by this title. In a general way however it may be said that this class embraces the things which the cities do not do but which they might do and which they ought to do, rather than the things which they do do, and ought not to do. The municipal corporation having undertaken municipal functions owes a duty to the citizen to provide conditions wherein he may have opportunity for self-development, and in so far as it fails to furnish those conditions does it depart from the full performance of its duty.

3. Moral Evils—This class consists in the corrupt use of civic authority for the furtherance of individual ends, and embraces such wrongs as the utilization of public funds as assets to pay party debts, the barter of franchises and contracts for boodle, etc., and the wilful failure to enforce the laws for a money contribute or political support.

Various causes are given for the existence of these evils, among which may be noted in the first class—that of Waste—the following: Ignorance, Partisanship, State Interference, Municipal

and Official Irresponsibility.

In the second class—That of Inefficiency of Service—the following: Individualism or the reliance on private effort to satisfy public needs, Lack of corporate powers, Undemocratic organization whereby the people fail to make their will effective.

In the third class—That of official corruption—the following: Greed, of officers and individuals; Lack of civic integrity and care for the public corporation; Private control of public privileges whereby special powers are intrusted to individuals and corporations.

These fundamental evils were recognized by the committee of the National Municipal League which had in charge the preparation of the Municipal Program adopted by the League in 1899. This League was organized in 1894 at Philadelphia when its first Conference for Good City Government was held. It is composed of persons and delegates of organizations interested in good city government, and is not to be confounded with the National League of Municipalities which like our California League is composed of municipal officials. The Municipal Program has been dubbed by others than its authors, "The Municipal Program," and as such has been referred to in all recent efforts at charter making. It was framed by persons who had given a great deal of attention to the subject of municipal government and their special work in preparing it extended over three years. "This program, then," Professor John A. Fairlie of Michigan University says in "Municipal Administration," the latest and best book on the subject (Sept. 1901), "as a serious attempt to frame a general scheme of municipal organization, is deserving of examination, and may also be used as a basis for presenting criticisms and divergent plans."

In framing the program the committee recognized the evils above mentioned and tried to provide a charter which, so far as fundamental laws would



go, would minimize them if not wholly eradicate them.

Prof. Fairlie says the leading characteristics of this proposed system of municipal organization are: 1, the disappearance of detailed enumerated powers; 2, local charter legislation for cities; 3, the mayor's complete authority and responsibility; 4, restrictions on political patronage; and 5, the position of importance given to the council.

The first characteristic above noted—that of the disappearance of detailed enumerated powers—is a novel one. The practice heretofore has been to specify every particular act which a city may do—from buying a fire bucket to loaning a library book.—The result being that what one town may do another town of similar size and character may not do. No such rule applies to individuals who we all know are limited in their development only by capacity and opportunity. Every human being has the free right of at least attempting to overcome even such limitations. Even private corporations are limited in their powers chiefly by the choice of those who draft their Articles of Incorporation. There are no restrictions upon a small bank becoming a big bank, except in the opportunities afforded it by its location, management and influence. Then why should cities not be given the same privilege of progressing or attempting to progress so far as their aspirations, inclination, opportunities and capacities may lead them. The program removes the hide bound limitations and gives all municipal corporations a free start and a fair show without favor or hindrance to the accomplishment of any municipal purpose.

The 2d characteristic referred to—that of local preparation of charters—tho new to many states, is familiar to us in California where some 15 cities have adopted their own freeholders' charters.

The third characteristic—that of the mayor's complete authority and responsibility—is found in operation in many

cities governed by recently framed charters.

The 4th characteristic—the restrictions on political patronage—refers to civil service provisions and is also a feature with which we are becoming gradually acquainted.

The 5th characteristic—the position of importance given the council—is a feature hardly in harmony with recent charter making and one which is usually considered the antithesis of the proposition to give the mayor complete authority. In developing a plan for harmonizing the two systems, making the mayoralty a position of authority and importance while at the same time preserving the integrity of the council, the program makers have shown their genius. The method by which this is effected is by granting to the council the legislative powers withdrawn from the State Legislature, thus strengthening the home rule features of the municipal government. The mayor's authority is fortified in executive ways, leaving the council almost exclusively a legislative body.

To accomplish so laudable a scheme of government the makers of the municipal program found it necessary first to prepare certain constitutional amendments. These are:

1. Relating to the suffrage and elections.
2. Prohibiting the Legislature from passing private or local bills granting exclusive privileges.
3. Provisions relating to municipal powers and organization.
4. Locally framed and adopted charters.
5. Providing for petitions by the people.

They then present us with a charter in the form of a general Municipal Corporations Act.

It consists of 7 articles and is only 38 pages in length. Some of our modern charters fill a whole book, so rigid as to details are they.

The first article relates to the incor-

poration of the city or town.

The second article relates to the powers of cities.

Article 3 refers to the Mayor.

Article 4 refers to the administrative service of the city.

Article 5 refers to the City Council.

Article 6 refers to the City Controller.

Article 7 contains a few general provisions.

Such is a brief outline of the skeleton of this charter and yet within its few pages are to be found provisions and restrictions which though short secure the blessings of all the modern ideas of charter legislation while not hampering the carrying out of such ideas by too much detail. Still where detail is desirable it is found fully set forth.

For instance, I will quote the first paragraph of the general grant of powers, Section 7 of Article 3 of the Constitutional Amendments. It reads as follows:

"Sec. 7. General Powers of Cities. Every city within the state shall be vested with power to acquire, hold, manage, control and dispose of property. Within its corporate limits, it shall have the same powers of taxation as are possessed by the state; it may license and regulate all trades, occupations and business, and shall be vested with power to perform and render all public services, and with all powers of government, subject to such limitations as may be contained in the constitution and laws of the state, applicable either to all the inhabitants of the state or to all the cities of the state, or in such special laws applicable to less than all cities of the state, as may be enacted in the manner hereinafter provided,"

The special laws referred to are those formally approved by the city itself or passed over its veto by a three-fourths vote of members of the legislature representing districts without the cities affected.

It is to be noted that these powers belong not only to the smallest municipal-ity but also to the largest one.

No one should dispute the wisdom of conferring powers on all municipalities alike by constitutional provision, after observing the beneficial effect of a similar grant of specified powers found in Section 11 Article 11 of our California Constitution, and which reads as follows:

"Any county, city, town or township may make and enforce within its limits all such local, police, sanitary and other regulations as are not in conflict with general laws."

This section has always received favorable construction and as a declaration of rights is a veritable Magna Charta.

In approaching the study of our California Charters—with special reference to those for small municipalities—we can do no better than to compare them with the Municipal Program referred to, in order to appreciate their prominent features.

Taking up the present Constitution of California and referring to the amendments proposed by the National Municipal League, we find as to their Art. 1, relating to voters and elections, that our constitution does not require a register of voters as the program does. Our constitution does not require a secret ballot; the program does. Nevertheless by act of Legislature we have both these advantages. The program requires the elections of city officers to occur at a different date from that of State officers. Our constitution leaves that for the charter makers. I am tempted to think that all cities in California now hold their city elections separately. San Francisco's new charter requires it; but prior thereto it was a crying evil that the voter had to prepare a blanket sheet city ballot as well as a similar State ballot. The result was that Municipal issues were swallowed up in State issues. A man was almost compelled to vote for his party's candidates for city offices. There were no city issues. Already a change is noted in the situation. At the recent election in San Francisco a local condi-



tion—if not a local issue—was responsible for the choice of a mayor. This local condition was the labor strike, an entirely local affair, tho one which very remotely affected the city government. Nevertheless in finding that the voters, in making their choice for municipal officials, did so with consideration entirely to their local affairs, we find progress. Better that they should decide as the result of their belief or disbelief in the attitude assumed by local people prominent in industry and business, and of the relation of city officials thereto, than that it should be decided by reference to questions of tariff or coinage, with which those elected will have nothing to do directly or indirectly. Next time an issue more directly related to the government of San Francisco may be before the people, and the result will be that the election will be decided entirely on that particular issue. Before the new charter, the people's will upon any such an issue could not have been satisfactorily known.

Another constitutional election provision of the program not found either in our constitution or laws is that requiring all nominations of city officers to be by petitions and that not more than fifty signatures to any petition shall be required. This is another clause for the purpose of discouraging partisan politics and encouraging voters to become personally acquainted with the qualifications of individual candidates. For this reason it is further specified that the voter must vote for each candidate. The city council is permitted to determine the form of the ballot where the election is by ballot, as distinguished from voting machines. In California the usual provision is that the cities must substantially conform to the State law which describes the form of ballot.

Passing to Act. 2 of the proposed constitutional amendments, we are pleased to find language almost identical with that of subdivision 19 of Sec. 25, Act. IV of our constitution, whereby the legislature is prohibited from passing local

or special laws granting franchises to any corporation, association or individual.

In Sec. 1 of the proposed Art. III it is provided that streets and other public places can only be aliened by 4-5 vote of the council and approved by the mayor. Our constitution (Sub. 7 Sec. 25, Art. IV) provides that the legislature shall not pass special laws authorizing the vacating of such streets and places. The legislature by general law has given the council authority to close streets after giving notice of their intention so to do, the usual plurality vote only being required.

Said proposed section also limits franchises to twenty years. Fifty years is the customary limit in California. Our constitution is silent on the subject. The proposed section has a very valuable provision that every grantee of a franchise shall make quarterly financial statements to the city and the city shall have authority to examine the grantee's books. In California we require water companies to make annual reports but our cities do not as a rule obtain access to the corporation's books to verify the statements. Other franchise holders do not even have to make reports.

The proposed Sec. 2 is similar to Sec. 31 of Art. IV of our Constitution which prohibits the lending of the credit of the municipality or the giving away of its money.

The program contemplates a general constitutional limitation of municipal indebtedness. In California the statutory limit to bonded indebtedness is 15 % of the assessed value of property. The program would exempt from this limit, however, bonds issued for water works or other specific revenue producing undertakings. We have no such exception. It was one which produced a great deal of discussion in the Good Government Conference. Some contended that its effect would be to remove all limit from the incurring of bonded indebtedness. In California we have a number of cities with water works and other enterprises which produce profit sufficient to pay

the annual installment of bonds. Nevertheless such indebtedness constitutes part of the 15 % maximum. That percentage however is large.

The program like our own constitution requires that provision be made to redeem bonds. The program does not attempt to fix the life of bonds, but the committee were of the opinion that it should not exceed 30 years. In California the limit is 40 years. Some years ago our provision was 20 years and it is a question whether the present term is not too long. Ten year school bonds in California have been found to work extremely well.

There is a provision in the program that the City Council may, with the consent of a majority vote of the people, establish a method of direct legislation, whereby the voters may submit and by majority vote adopt propositions relative to city matters. They may also in the same manner establish minority or proportional or other method of representation as to elections of city officials. It is to be noted that these provisions which may be thought somewhat advanced are only permissive. The city is given the privilege of adopting them but is not required so to do. In the new charters of San Francisco and Vallejo there is a somewhat similar provision for direct legislation, and such a provision was recently placed in the County Government Act with reference to the adoption of ordinances. The legislature failed to provide, however, that such ordinances could not be repealed by the Board of Supervisors and the Supreme Court has held the statute invalid, for the reason, among others, that there could not be two coordinate law making bodies.

The program has a very complete system of city accounting, requiring it both by constitutional provision and by the Corporations Act. A state fiscal officer or board is provided who shall specify the forms of stated city financial reports, which must be made to him at least annually and published by the state.

Such officer is also authorized to inquire into the financial condition of the cities and into its accounts. This provision is unknown to California tho the charters usually provide that certain city officers must make periodical reports to the Council.

The program permits cities to establish their own minor courts for the trial of offenses against the city ordinances. In California such courts are established by general law except where provided for in freeholder charters, and the writer is inclined to favor such procedure.

With reference to organization, the program constitutionally provides for a Mayor and members of the Council to be elected by the people. All other officials are appointed. This seems somewhat radical to us. In California we not only elect the Mayor where there is one, but also the Council, which is sometimes termed a Board of Trustees, and also the Clerk, Treasurer, Assessor, Tax Collector, City Justice and sometimes other officials. Under the program administrative officials are appointed and removed by the Mayor. Subordinate employes are also appointed subject to civil service regulations.

The program gives the privilege of preparing a local charter only to cities having a population of 25,000 or more.

In California, under Section 8, Article XI of the Constitution as amended in 1892, any city of more than 3,500 population may adopt such a charter.

Passing to the municipal corporations act of the program, we find that the first article relates to the incorporation of municipalities and is similar to our own laws, a majority vote being required to adopt.

The second article relates to corporate powers. Like the proposed constitutional provision it is ample in scope. It provides that: "The inhabitants of any city incorporated under this act are hereby constituted a body politic and corporate which shall have perpetual succession, may use a common seal, sue



and be sued, and, for any purpose which it deems necessary or expedient for the public interest, perform and render all public services, and acquire property within or without the city limits by purchase, gift, devise or by condemnation proceedings, and hold, manage and control the same."

It will be noted that they may perform and render all public services for any purpose which the city deems necessary or expedient for the public interest. What are "public services?" A somewhat similar question has arisen with reference to the words "public use" as used in our constitution with reference to the doctrine of Eminent Domain. In the case of *Gilmer vs. Lime Point* (18 Cal. 229) it was said by our Supreme Court that the words "public use" mean a use which concerns the whole community, as distinguished from a particular individual or particular number of individuals. But it is not necessary that each and every individual member of society should have the same degree of interest in this use, or be personally or directly affected by it in order to make it public. It was further said that in determining whether the exercise of this power be proper in a given case, the legislature is the conclusive judge of the public necessity or advantage.

In *Cooley on Taxation* (2d Ed. 113, cited in *Irrigation District v. Williams*, 76 Cal. p. 369) it is said that "for the most part the term 'public purposes' is employed in the same sense in the law of taxation and in the law of eminent domain."

Upon the question of the necessity of the public service, it has been held by our Supreme Court (*Co. of Siskiyou v. Gamlich*, 110 Cal. 94) that under a statute giving them power the County Board of Supervisors had jurisdiction to determine whether a new road is necessary or not, and if necessary over what route it should be laid out and constructed, and the court would not therefore enter into the consideration of the proposition

that in the particular instance there was no necessity for selecting the particular route.

The program gives the city authority to perform any public service which it deems necessary or expedient. It would doubtless be held that their decision upon the necessity or expediency in a particular case would be beyond investigation.

It will therefore be seen that the city under the proposed Program has very extensive powers. If it wished to establish public baths, or electric light works, or street railways, or telephone lines, or bicycle paths, or automobile systems, or any one of the numerous agencies, and perform any one of the numerous functions, which modern civilization requires and inventive genius is rapidly devising, all it would have to do would be to go ahead and do it. At present we have to either distract ourselves with appeals to the legislature or to the voters to amend the charter, independently of any inquiry as to the possibility or advisability of the particular public service.

As said before California charters, for both small and large cities, go minutely into details with respect to municipal powers, and it is understood that such cities only have the powers expressly given to them. As an instance I will state that it was found advisable at the last legislature to procure on behalf of sixth class cities an amendment to the law which would give them authority to establish fire limits. Some Superior Judge had decided that they had no such power. Perhaps he was wrong. Perhaps they had it anyway under the constitutional grant of police power. But nevertheless it was found desirable to give the authority in express terms. The necessity should not have occurred.

Another instance of needless detail may be cited in the act passed by the last legislature providing with great care for the licensing of bicycles, automobiles, etc. Unfortunately they left

out flying machines, so that who knows but what the act will have to be amended in a few years.

The charter of 6th class cities contains 17 subdivisions in the section relating to the powers of Boards of Trustees; that of 5th class cities 19 subdivisions. Of the freeholder charters San Jose has 21; Berkeley, 24; Pasadena, 24; Fresno, 30; Santa Barbara, 45; Vallejo, 51; Eureka, 61. San Francisco's new charter has 35. The cities operating under the 5th and 6th class charters will be found in practice to be able to fulfill the principal municipal functions fairly well as compared with the cities having freeholder charters, even though existing with apparently less than one-third the powers of Eureka of the latter class. Even in California the making of general laws for a large number of municipalities has been found to result in less complexity than in making detailed regulations for a particular locality.

The program relieves us of all these difficulties of detail by giving all cities a general grant of powers to legislate for the municipality.

The program provides for a Mayor. Our fifth and sixth cities do not, but vest certain clerical functions usually performed by such an officer in the president of the board of trustees. Berkeley's freeholder charter does the same but the freeholder charters of all the other cities above mentioned provide for a Mayor.

The program does not attempt to specify the number of councilmen but specifies that they be elected from the city at large and shall hold office for six years, one-third retiring every two years. In California the fifth and sixth class cities have five trustees each. They hold office four years, two and three retiring every two years. There are no wards. The freeholder cities generally have wards. Eureka, San Jose, Vallejo and Pasadena each have five councilmen. Berkeley and Santa Barbara each have seven; Fresno eight;

San Jose and Pasadena nominate four from wards and one at large. In Vallejo, Fresno and Pasadena those nominated from wards are elected at large. Berkeley and Santa Barbara elect their councilmen one each from seven wards; Eureka the same with her five. Fresno and Vallejo nominate all theirs from wards.

This question of the election of councilmen from wards is one of those hotly contested by reformers, it being claimed that the ward system results in the selection of mediocre men. The idea of nominating men from wards and electing them at large seems to be a compromise, as is the plan of electing some from wards, some at large. Pasadena combines both compromises by nominating four from wards, one at large, and electing all at large. San Francisco's eighteen supervisors are all nominated and elected at large.

With reference to the terms of office, our fifth and sixth class cities have four year terms. So do Berkeley, San Jose, Vallejo, Fresno and Pasadena. Eureka and Santa Barbara have two year terms as has San Francisco. Of course the two year cities elect an entirely new board every two years. Most of the four year cities retire a portion of the board each two years, but Fresno through her recently framed charter chooses an entirely new board every four years. It will be interesting to note how the system works in Fresno.

The municipal program provides a complete civil service system. This is something new to California, though in San Francisco the politicians are reluctantly becoming acquainted with the system.

The program provides that the mayor must prepare a budget of expenses and that the council in levying taxes may reduce the same but cannot raise it. This is in accordance with the responsibilities imposed on the mayor, with reference to the city management. In California Pasadena requires the coun-



cil to make up the budget and permits the mayor to veto items in it. Thereafter it shall require the vote of four of the five councilmen to overcome such veto. Fresno requires no budget and simply permits the trustees in old-fashioned style to levy taxes for the different funds. Santa Barbara's provision is the same. In Vallejo the mayor, city collector and city auditor constitute a Board of Estimate which shall prepare an estimate of the probable necessities for the ensuing year. Thereafter the trustees fix the rates but do not appear to be required to follow the estimate given them. In San Jose the clerk prepares the estimate and the council has full power to fix the tax rate. In Berkeley and Eureka no estimate is required and the board has full power. In most California cities there is a limit on the tax rate. In cities governed by freeholder charters the dollar limit is quite general. The same is true of fifth class cities. In sixth class cities the limit is 75 cents on the \$100, but this does not include school taxes which are not under the dominion of such municipalities.

Under the program the mayor appoints the heads of departments and subject to the merit system all subordinate officers and employes. In California the fifth and sixth class cities vest such authority in the council. In Eureka, San Jose, Vallejo and Pasadena the mayor makes the appointments with consent of the council. In Santa Barbara the mayor makes the appointments and may suspend, but in case of suspension he must report the same to the council which may continue the suspension or declare the office vacant. In Fresno the provision is the same as in Santa Barbara except that the appointments by the mayor must be with the consent of the council. In Pasadena the mayor may even suspend an elected official who refuses to permit the city expert to inspect his books.

With reference to the veto power of the Mayor, the program allows it with

respect to both ordinances and resolutions. The same rule prevails in Pasadena, Vallejo and San Jose. In Fresno the Mayor may veto ordinances and contracts. In Santa Barbara and Eureka the veto power extends to ordinances.

One of the strong features of the program is the city controller. He must keep accurate books of account. These accounts must show not only the appropriations, receipts and expenditures of the city, but also separate accounts for each franchise holder showing the cost of construction, equipment and maintenance, amount of cash paid in, stock issued, amount of indebtedness, taxes paid, dividends declared, fixed charges, allowance for interest, wear and tear, all sources and amounts of income, the amount collected from the city and the service rendered therefor, and also the amount collected from users of the system and the service rendered therefor. These details concerning the holders of franchises, of course are public property, and it is believed that the publicity thus given as to the condition of quasi-public enterprises will operate as an effective public control of the same. Besides it will tend to prevent friction between the corporations and the people, because in the first place watering of stock will be checked, there will be no necessity for the corporation's seeking exorbitant rates from the community, and in the event of manifest need for increased rates from the community the facts showing the reason for such increase will be so patent and probably within the knowledge of the public that opposition thereto will be minimized. Such knowledge will also tend to lessen controversy in the event of the municipality's acquiring the works of the franchise holder.

Lack of knowledge is always a cause for controversy. Our courts are maintained chiefly because of disputes as to facts. Juries exist for no other purpose than to determine what are facts.

Lawyers waste their energies in attempting to prove them. Anything therefore which will establish the existence of facts will prevent trouble, encourage peace and insure happiness. Our leaders in national affairs are beginning to believe that the only way of approaching a solution of the trust problem is through the medium of publicity of accounts. As the trust evil is a patent cause of irritation in the realm of the nation, so has been found the private ownership of franchises and performance of quasi-public functions been found the most potent cause of trouble in municipal affairs.

It has been the extent of that evil which has forced the doctrine of the municipal ownership of public utilities upon a people who would naturally prefer the theory of municipal government that the city least governed is best governed. The makers of the municipal program believe that the publicity of accounts of franchise holders will help us toward a solution of this problem, and to that extent their suggestion should be and will be welcomed both by the advocates of municipal ownership and the opponents of such ownership.

In California we have made a beginning in this matter of publicity of accounts by requiring statements from our water companies, and it has certainly had the effect of strengthening the hold of the municipality on the companies.

Reviewing the situation of our California Municipalities as judged by the cities referred to, and remembering the characteristics found by Professor Fairlie in the Municipal Program, we find.

1. Great detail in the enumeration of powers.
2. Local charter legislation for cities.
3. A reasonable amount of authority and responsibility on the part of mayors.
4. Few restrictions on political patronage (except in San Francisco, which is properly not a small municipality.)

5. A reasonable amount of authority given to the council, with no very clear distinction between executive and legislative functions.

They therefore depart from the program wholly with respect to the first and fourth features; follow it fully with respect to the third and fifth features.

Comparing our cities having freeholder charters with those incorporated under the general law, we find the prominent distinctions to be that the cities with modern freeholder charters provide for a mayor, while the 5th and 6th class municipalities do not, and the former provide for the ward system while the latter do not. It is doubtful whether in not adopting the ward system the municipality is not the gainer, while the fact that our 5th and 6th classes have done so well without an executive is a strong argument against an increase in executive authority and in favor of government by councils. Such is the English method and it is claimed that British cities are better governed than American. In this connection it is to be noted that a number of California cities have retained their fifth and sixth class charters long after having increased in population beyond the point designed for such a form of government. Pasadena, for instance, changed from a sixth class charter to a freeholder charter about a year ago, though having a population several times in excess of the sixth class of cities. Alameda still retains its fifth class charter though now in the fourth class.

On the whole our California municipalities have many of the features most strenuously demanded by reformers in the large centers of population. Nevertheless we all admit grievous delinquencies in our local administration, and this brings us back to our original observation that organic laws will not insure good government. We must have a people whose interest and participation in forming and carrying out municipal policies and purposes is active



and constant. A thought from Massachusetts may do to close with. Brookline, a city of 20,000, is still a Massachusetts town, and as such governed and governed well by the old New England style of town meeting. Perhaps we have departed too far from our Yankee origin? At least there is room for improvement and the writer is of the opinion that such improvement will be found, first in the generalization rather than in specialization of laws and second, in encouraging the formation of public opinion by allowing public participation in municipal affairs through frequent plebiscites and such other means as may be suggested.



### Hints on Municipal Government.

BY TRUSTEE DEVINE OF SACRAMENTO.

Much has been said and written, many and various theories have been advanced for the improvement of city charters, with the object in view of securing the most practical, economical and efficient government applicable to our rapidly growing cities.

My observation and experience in municipal government is that some of these so-called modern up to date theories are very defective, dangerous and will be detrimental to the safety and the correct economical government of Twentieth Century American Cities. For instance, it has been suggested that ward representation be discontinued, and amendments have been submitted to the people lately in many California cities for the purpose of dispensing altogether with district or ward representation in municipal legislative bodies and as a substitute therefor, to have all councilmen elected at large. This to my mind seems to be very bad policy as politics are now carried on in our California cities. I will cite Sacramento for an example.

This city is divided into nine wards where the salary is only \$20.83 per month, or \$1000.00 for four years. The man whose ambition for municipal hon-

ors would urge him on to seek the nomination for trustee and win out and make his campaign for five weeks, will have to spend five hundred dollars or more, allowing that he can make his campaign for that amount in his district, which is half his four years' salary. If he was obliged to make a political campaign extending over the whole nine wards of the city, it would cost him at least nine times as much, or \$45,000.00 to be elected a councilman in Sacramento City. As a business proposition, there are but few honest intelligent, capable men who would engage in an enterprise of that character, and there are but very few men who are philanthropic enough to expend \$4500.00 for the purpose of getting a very onerous public position for four years where he could only earn \$1000.00 during his term of office. Therefore, I am opposed to this system of electing councilmen, because it is opposed and foreign to the incomparable form of government of this great American Republic, which has stood the assaults of time and is to-day the envy and admiration of the world. The framers of the wise government of this Republic evidently considered every feature of the best possible means of securing the very best of representative men in their national and state legislatures, therefore, each man had to be a bona fide resident of the district he aspired to represent in Congress or the state legislature. These conditions were properly provided so that their constituents could be familiar with the character of the men they should choose to represent them and guard their interests and provide for the necessities of their respective districts. The government of all the states of this Republic, the Republic itself, and ninety-nine per cent of all its cities, are conducted on this wise and equitable plan. The idea has been advanced by several presumed experts on municipal governments lately, that inasmuch as all the councilmen take a

and in expending all the money provided by the taxpayers for the maintenance of the city government, they should therefore be elected by the people at large. This same theory can be applied to Congress. The congressmen from Maine and Vermont, Florida and Alabama pass upon the expenditure of the money contributed to the national government by California, Oregon and Nevada. The people of the Pacific Coast take no part in selecting the Congressmen from the Southern States, nor the New England States, nor the members of the respective legislatures. The same may be said of the supervisors of nearly every county in this State and every state in the Union. They are selected from certain described districts, where they are well known, and voted for in those districts, which seems to be the correct method of securing the most able and efficient representatives for all public legislative bodies, and they move along under this system successfully and harmoniously without a hitch from the National Government at Washington, down to the smallest hamlet in this blessed land. There are many other tangible reasons why councilmen should not be elected at large. There are some cities in this State where one or the other of the two great political parties are so largely in the majority that there is scarcely a shadow of hope for the minor parties to elect a single city official where the councilmen are elected at large, while if they are voted for by districts there will be one or two wards where the minority will be strong enough to elect some members of the municipal council who will be free to act for the best interests of the taxpayers and the people generally. On the other hand, in the cities where the political parties are so unevenly matched and the strongest political party is dominated and controlled by centralized capital in the form of railroads and other corporations, whose potent influence in politics is such that they can secure the nomina-

tion and election of their own employees and agents in many cities and counties of this State whose official policy the aforesaid corporations will invariably dictate and shape in the interest of their own cupidity; and by such manipulation of politics they are easily enabled to own and control all the public utilities, such as water, gas, electric power, etc., and escape the payment of their just portion of municipal, county, state and National taxes, for the support and maintenance of the government that fosters, protects and patronizes them.

I believe that if the ward system of electing city councilmen is continued the people will occasionally elect an honest, independent and conscientious man from some of the wards that are still free from the evil influence of the dominant party, whose presence in the municipal council chamber would be of most vital importance and of inestimable value to the taxpayers and people of the respective communities electing such worthy men.

I say without prejudice that the proposed amendment to City Charters which would concentrate absolute power in the hands of the mayor of any American city to make appointments of not only the heads of all municipal government departments, as well as every policemen firemen and all the laboring men in the city parks, the public streets, in a word, of all the employees of a city, is decidedly aristocratic and absolutely un-American, but would be the upbuilding of an absolute autocracy in every American city adopting such an unreasonable amendment to its charter. Such an amendment would give a political mayor a complete monopoly of all the patronage of a great city, or even a small town, through and by which he would be enabled to perpetuate himself on such communities indefinitely. The way that politics is carried on these corrupt, double-dealing days, under this amendment a shrewd, political mayor



could pay all his political debts at the expense of the poor plodding taxpayers, or he could do as one thrifty mayor whom I have known in my long experience with municipal politics did, by auctioning off (secretly to be sure) to the highest bidder all those lucrative municipal positions, regardless of the capabilities or the fitness of the buyers to discharge the onerous duties of the city officers they had purchased. Again this same autocratic mayor could dictate and control all the patronage of appointees by coercing them to purchase all the necessities of life at certain stores and coerce them into patronizing certain doctors, so that when he was up again for political honors all the city officials who held their fat jobs through the influence of this virtuous mayor would appeal to those storekeepers, butchers, wood and coal dealers, beer and whisky sellers, contractors, lawyers, ministers, etc., as a matter of business to vote for their friend Brown for mayor; that if he is not elected they will lose their jobs and will not be able to pay the bills they owe them, nor will they be able to patronize them in the future if the said butchers, doctors, etc., do not vote for their friend Brown for mayor. In this manner the political mayor, no matter how corrupt he is or may be, is enabled to perpetuate himself on a helpless community forever. This amendment would transfer the whole political power of the people of any city in these United States from themselves to the hand of any one man.

I can not see for the life of me how any intelligent American can entertain for a moment or encourage an amendment to the organic law of their cities so much at variance with the grand and inimitable principles upon which our incomparable government is founded, or how any man in this twentieth century can claim for the mayor of a city official powers and privileges denied the President of these United States, as the United States Sen-

ate wisely passes upon the fitness of presidential nominees and appointment for the respective positions for which they are named.



### Suggestions to Charter Makers.

BY H. A. MASON, OF SANTA CLARA,  
SECRETARY OF THE LEAGUE.

A City charter is the instrument which creates a municipal corporation, defines its boundaries, invests it with powers, directs the manner in which such powers shall be exercised, and fixes the limitations upon such exercise.

Good government is the result of enlightened public opinion. The people obtain and retain the exact amount of good government that they can appreciate. No matter how idealistic your government may be it will not continue unless the people appreciate its blessings. The degree of good government to be reached in the future is to be measured by the average ideal of the electorate. To secure better government we must educate the public mind to a conception of higher ideals.

The betterment of municipal government during recent years has been due to the awakening of the public mind and consciousness to a realization that better government was worth the striving for; it is due to the fact that the citizens are beginning to appreciate the advantage of having smooth, clean and well-lighted streets, proper sanitary conditions, proper police and fire protection, and the various things that the municipality is supposed to supply to its inhabitants.

The cause of good government will continue to advance as our appreciation grows of other things which the municipality may supply in the future. This point should be borne in mind, and I shall refer to it later in considering the matter of "powers."

It may be noted, however, that the phenomenon has been presented occasionally, of an improvement of municipal

al conditions following the adoption of a new charter, and the credit of such improvement is frequently given to the charter itself.

For example, we have heard it said, that since the adoption of San Francisco's charter two years ago, its government has been vastly improved, and is proof thereof a clean city hall is pointed to where before there were dirt-begrimmed walls and an odor of filth. We are directed to better, cleaner and lighter pavements, a more efficient fire department, and more important still a better administration of the City's finances.

Now, does any one mean to assert that the old charter prohibited clean public buildings, improved streets, efficient fire departments and an economical administration in general.

After all is not the improvement cited due to the men who administered to the municipal affairs, and proceeding further, does it not appear that the men were selected by the public vote because the people were tired of uncleanness of streets and buildings, weary of the extravagance which had theretofore prevailed? In other words, the public mind appreciated the advantage which would accrue to them through improved municipal conditions and voted for them. It was the public discussions which took place contemporaneous with the adoption of the new charter that educated the people to a realization of better things to be secured and enjoyed.

This is not asserting that the new charter is not better than was the old. It is better in that it is more efficient in its operations. And this is the point that I wish to suggest at the outset.

#### THE OBJECT OF A CHARTER.

The object to be aimed for in the framing of a new charter is efficiency. Abandon the idea of making dishonest officials honest by charter provisions. Try to secure efficiency, and by efficiency I mean the securing of the

greatest output of good works with the least expenditure of energy.

A charter can be likened to a machine. A mechanic in constructing a machine strives to secure efficiency—the largest possible output with the least amount of applied energy. To this end he seeks for simplicity—a machine with few parts—the thing to be avoided is friction.

This is true of charters. If we want efficiency we must avoid the friction that results from the creation of innumerable parts, and by parts I mean offices, bureaus, commissions and departments.

Now where shall we look for a model for our charter machinery that is simple in construction, yet which can work rapidly and accomplish satisfactory results? I would suggest that such a model exists in the charters of our private corporations. Now-a-days we have come to regard municipalities as business corporations, their functions are becoming to be largely industrial. It may be said that the difference between a public corporation and a private one is mainly in the character of its product. A City may be said to manufacture street pavements, sewers, public structures, furnish water, light, manage fire departments, and finances these operations. In point of magnitude there are many private corporations that do a bigger business than does a public corporation. The charter of a private corporation doing a business of a hundred millions annually with perfect security to a hundred thousand stockholders, ought to be adequate for a city doing half that amount of business.

A study of the charters of private corporations will disclose the fact that all of the powers of the corporation are vested in a single board of directors, elected by the stockholders. All other officers are chosen by the board of directors, and all departments are created by them. There are practically no restrictions upon the exercises of their powers. The result is that the



work of a private corporation is done expeditiously; it can execute rapidly and whatever it undertakes to do is performed with a minimum of friction. And we point to our private corporations as being the most wonderful creations of the age, and it is even said that they are more powerful than the government itself. Surely then, is not their form of organization worth copying?

But to come to the work of actually making a charter. I have already stated that the purpose of a charter is to create a corporation, define its boundaries, invest it with powers, direct the manner in which powers shall be exercised, and fix the limitations upon such exercise.

The first article of a charter then should be to give the corporation a name and define its boundaries. As these boundaries may be subject to change in the future, it should be provided that new territory may be added or present territory may be excluded by the method prescribed by the general laws of the state. If the charter is for an existing city, the fact of succession should also be stated.

The second article should be to confer the necessary powers. By an examination of the freeholders' charters of the cities of the State, it will be noted that with one exception the powers of a corporation are generally stated to be "to have perpetual succession, may sue and be sued, and to acquire property, and to have a seal." What other powers the city may possess are not given to the municipality directly, but are conferred upon the Board of Supervisors, Trustees or Mayor and Council, and by them exercised for the benefit of the municipality. While the result is practically the same, I believe that the logical manner of conferring powers is to vest them in the municipality. This method of stating powers has been followed in the charter of Pasadena, and in that respect it is a model to be generally followed.

I have not the time nor space to here enumerate all the powers that should be conferred upon the municipality, but a very good enumeration will be found in the charter of Pasadena, just referred to. It is the best recital of powers that I have ever seen in any charter.

Generally speaking powers should be broadly stated and liberally conferred. A municipality is an organism that is capable of growth. The more power it has the greater will be its growth; a restriction of powers will restrict its growth. Furthermore the betterment of municipal government may be promoted by a liberal grant of power. By doing things we interest the popular mind in the cause of good government. The more things that we can do the greater appreciation will be manifested by the citizens. As good government is measured by the degree of appreciation which the acts of the municipality receive from the electorate, it is essential that our municipality should have power to do as many good things as possible.

As the legal rule is that municipalities can only exercise such powers as are expressly granted or necessary implied it is quite essential that there should be no omission of powers ordinarily exercised. Mistakes in this matter have been committed by freeholders in the framing of a charter. In Oakland, the city attorney a year or so ago reported that the city had no power to erect a garbage crematory. It might be wise, in conferring powers, to include all those that are at present being exercised by any city in the world, because there is no telling when a demand might arise for the city to assume some new function, and we must prepare for the future. There is no harm in having power though there is no immediate need for its use. European municipalities exercise much greater powers than American, and these are some of the things done and maintained by them that have not as yet been thought

necessary to be done by our municipalities, viz: Municipal fire insurance, municipal savings banks, municipal slaughter houses, municipal tenement houses, municipal pawn shops, municipal restaurants, municipal telephones, municipal tramways.

I can see no harm in having the power to conduct these enterprises given to our cities, even though the time may never come when it will be considered expedient to exercise them. But the possession of such powers might some time be very convenient.

The third article of a charter might be devoted to the manner of exercising the powers that have been vested in the municipality. As to how these powers shall be exercised, and by whom, has been the cause of endless discussion; and up to the present time no solution of the questions involved has been found. An attempted division of the powers has been made into judicial, executive and legislative, but when it comes to vesting those powers into three separate municipal departments, extreme difficulties arise. There are times when the legislative body must exercise judicial powers, as when assessments must be equalized and water rates fixed, and it is almost indispensable that the legislative should exercise some sort of a supervision over other departments, otherwise an intelligent exercise of taxing powers would be impossible. No scheme by which the legislative body shall exercise solely legislative powers, has been devised and the very fact that they must supervise the other departments for the purpose of ascertaining the adequacy of the tax levies gives rise to much friction.

There are three methods of vesting municipal powers.

First, the distributive method, by which a number of independent departments are created, the duties and responsibilities of each defined, and those in charge thereof elected by the people.

Second, by an attempted division of

powers into administrative and legislative, and the vesting of all administrative power in the hands of one man (the Mayor), and the vesting of all legislative powers in a body of men called a council, board of trustees or supervisors. The Mayor appoints all administrative officers and is himself elected.

Third, the vesting of all powers in the hands of a board of trustees or council.

Each plan is capable of almost infinite modifications. And we have in this country examples of many of such modifications and variations. In fact, we have no pure example of any of the above plans in this State.

In most of the larger cities the general plan is that first given. There we see the department plan. We elect a clerk, an assessor, a tax collector, treasurer, an attorney, a mayor, a board of trustees or council, the head of the street department, the head of the police department, and occasionally members of the board of public works. These different departments are independent to each other, each being responsible to the electorate and each responsible for its own acts and not responsible for the acts of any other department. The arguments against this system are well known and need not be repeated, except to say that it is the source of endless friction and consequent inefficiency. We have progressed so far in charter-making in these days as to have generally abandoned the plan and the tendency for several years past is towards the second plan, the abolition of the department system, and the adoption of the centralized administrative system. In this as few administrative officers as possible are elected, but instead they are appointed by the Mayor, and on him is fixed the responsibility of the conduct of all subordinates. The advantage of the plan over the former is that usually more capable and efficient officers are appointed, for the mayor is generally better qualified to judge of the qualifications of the officers than



the electorate possibly can be. The appointment is usually made for a long term and a permanence of administration is secured not possible under the elective system, where short terms are the general rule. This also adds to the efficiency of the administration.

But there are several serious objections to this plan.

*First*, it has a tendency towards autocracy which is repugnant to the principals of a democratic form of government.

*Second*, the fixing of such large responsibilities upon one man creates antagonism of a personal nature and interferes with the smooth working of the governmental machine. The power of appointment is a breeder of enemies. It has been truly said that every appointment made makes ten enemies and one ingrate. The result is—that however good a man you may have for Mayor, he becomes thoroughly discredited at the end of his term and is refused a re-election. It is an exception in this State to have a mayor re-elected. And the result is that a new, untried and inexperienced man is always at the head of the municipal government. In adopting the centralized administrative system, we have virtually declared that it is our policy to have a new general manager every two years—and no charter makers have had the temerity to fix the mayor's term for longer than two years. If some large public corporation were to provide in its charter that its general manager should not serve longer than two years, we would unhesitatingly declare that such a policy lacked the first element of sound business judgment. Yet that is what we do with our municipal government and wonder why it is such a failure as a business organization.

The third objection to the system lies in the fact that much friction arises between the administrative and legislative departments.

The legislative body having of neces-

sity the duty of furnishing the fund wherewith to carry on the government feels as though it ought to be consulted as to the manner of its expenditure. It is responsible for the amount of the tax levy and to keep the same within reasonable bounds considers it to be its duty to supervise the work of the administrative branch, with a view of securing economy and thereby preventing an exorbitant tax rate. Sooner or later there is sure to occur a serious clash between the two branches of government, and when the clash occurs the business of the municipality is for some time in a state of paralysis. To be sure there are times when the machinery will be working smoothly and with apparent harmony. When the mayor is what you would call a strong man, with his convictions, and possessed with an ability to impress his views upon those about him, honest in his endeavors and bent on securing economy and efficiency, there will be little friction observed and a good government will result. But with a weak man the opposite will be the result. The third scheme of vesting the exercise of municipal powers, *i e*, the centering of all power, legislative and administrative in one body composed of a number of individuals, has never been tried to any extent in this country. The nearest approach we have to it here is to be found in the charters of our small cities of the 5th and 6th classes. In the latter class there are but three elective officers, the clerk, marshal and treasurer. All powers except those exercised by the officers named are centered in the Board of Trustees. I consider this system as the truly centralized scheme of government. A popular impression that to constitute a centralized form of government all political power can be centered in one man, and this form of government is denominated an autocracy, which almost akin to tyranny. I can conceive of a form of highly centralized government that is

essentially democratic and that is to centralize all political power in one body composed of many men. This is the system of municipal government prevailing in England. It is also the system of management adopted by our private corporations. Judging solely from results, this system is the best of the three. The English municipalities are said to be the best managed of any in the world, and certainly our private corporations are familiar examples of the efficiency of operation.

But in order to secure the successful working of this plan in this country, it must be accompanied by a public sentiment which will demand

1. That the different departments be in charge of an expert specially qualified for its management;
2. That all employees shall be chosen on account of their merit.
3. That the term of their employment shall be continuous with a faithful discharge of their duties;
4. That the entire municipality be under the management and supervision of a man who has adopted the profession of municipal management, and who by long years of service has become a municipal expert.

This public sentiment exists today in England and Germany, and that is the secret of their advanced municipal government. It is a sentiment moreover, that is growing rapidly in this country. Many of our foremost students have become firmly convinced of the necessity of our local affairs being placed in the hands of experts. The press is discussing the subject earnestly and for the most part favorably, and the tendency toward securing permanency of administration in the hands of experts is decidedly marked. If there is any town in this State where public sentiment has crystallized itself into an expression favorable to the establishment of this kind of municipal government, then by all means I should recommend the adoption of the centralized English Council system, with very few

modifications and restrictions.

In adopting this system it is essential that the legislative body should be reasonably permanent and a minority only should be subject to a change at one election. A term of six years, with one-third of the body elected every two years, would be perhaps nearly the correct thing.

To preserve its democratic character the council should be composed of numerous individuals.

When the powers bestowed upon the municipality have been duly vested, whether to departments, mayor or council, and the terms and compensation of the officers and the method of the election have been settled, all additional provisions are in the nature of restrictions upon the exercise of the powers.

Under the head of restrictions can be enumerated, the veto power; The limitation of taxation; imposing qualifications upon officials, in addition to the possession of ability, prescribing methods by which any municipal business shall be transacted.

The conferring of a veto power usually accompanies the plan which makes the mayor the responsible head of all departments of the city government. It is the cause of much friction and for this reason should be avoided. As a check upon bad legislation, it is effective only on rare occasions. It is sometimes used to prevent good legislation.

Under the council system there is no use for the veto at all. As the mayor is elected by the council, his power of veto would in reality rest with the council.

The limiting of the rate of taxation rarely checks extravagance. Officials inclined to wilful extravagance usually satisfy their desires anyhow, which can be easily done by a failure to make needed permanent improvements. The establishing a "dollar limit" frequently cripples the municipality. When additional revenue is needed the municipality has resort to the obnoxious sys-



tem of licenses, which the Supreme Court recently said was "a burden laid upon industry and a fine imposed upon business enterprise."

The effect of a tax limit is an injury in another way. A certain class of our citizens can only be educated through their pocket books. When a "dollar limit" is incorporated in the charter, this class set back and exclaim "No matter how corrupt our officials may be, they can't hurt us much." And they have no further interest in securing a better local administration. If it could be impressed upon their selfish minds that they might be "taxed out of their boots" unless they took an interest in public affairs, the result might be highly beneficial to the community.

Limiting the tax rate has also a tendency to increase the bonded debt. Necessary improvements cannot be made, hence money is borrowed, and before the debt is paid the interest charges equal the amount borrowed. It would be better to levy more taxes and pay as we go.

Additional qualifications are frequently imposed upon officials other than the ability to fill the office. The most customary is a requirement that all officials shall have been residents for a term of years, sometimes as long as five. This operates to prevent the employment of officials who may have had long experience in the conduct of municipal affairs, especially the experience gained in other cities. This policy is in violent contrast to that prevailing in England and Germany. In those countries officials are "called" from city to city as their abilities in certain lines are demanded. We have the same policy in relation to our Educational system, employing the best teachers obtainable, no matter where their residence may have previously been.

It is time to educate our citizens to apply the same policy in respect to our municipal government. We never will achieve great results until we do realize that ability to manage municipalities

must be sought for.

It has become a habit with charter makers to prescribe the methods by which the work of the municipality is to be performed. Thus in charters we find a complete street improvement law, proceedings for issuing bonds, system of accounting, in fact a code of law governing the municipality. It is my judgment that the street laws and bond proceedings provided for in various charters are not as good as those in the statute books. It would be wiser if such provisions had been wholly omitted. All the minor details, like accounting systems etc had better be left to be provided for by the legislative body. Charters are difficult of amendment and nothing should be put in that can possibly be omitted. Charters of cities should be like constitutions of states, be a declaration of settled principles and not a code of laws.



### General Discussion.

The President. Does any one desire to discuss any of the questions that have been raised by the papers read this evening?

Mr. Keegan. I have been delighted with the very able papers that we have had this evening. I desire to make motion that the chair appoint a committee of five, whose duty it shall be to attempt to frame an ideal charter. I feel one will be very much pleased to get at least a partial report at the next convention of the League from such a committee.

Mr. Kirkbride. I think, Mr. President, that there is a germ of merit in Mr. Keegan's ideas. Although it is, of course, impossible that we could attempt anything especially new on this subject or could probably make any advance, I think it might be worth while to study up these questions somewhat with reference to our local conditions. I will therefore, second the motion, with the understanding that the committee is appointed for the purpose of studying the

various questions of charter making with reference to California, and not with any other special purpose.

The President. And to prepare a draft of suggestions?

Mr. Kirkbride. To enter into the study of the subject with reference to California conditions. I do not think it would be feasible to submit at the next meeting of the League a charter, but it might be advisable to suggest certain modifications in the general laws for the purpose of effecting harmony amongst charter provisions.

The President. Why could you not take the charter suggested, Mr. Kirkbride, and adapt it to California conditions?

Mr. Kirkbride. I think there is an opportunity to do that very thing.

Mr. Keegan. In Santa Rosa we have a freeholders' board now in session, to formulate a charter for the government of our city. If we had even a partial report from such a committee, it would be of great help to us. If I take these bulky papers with all the wisdom there is in them, to our freeholders, with all the other matter that is placed before them in this bulky form, it will simply be laid aside. I do not say this out of lack of appreciation of the work that has been done on these papers, but I would like to have the matter brought right down to a pivotal point, and the gentlemen who have read the papers I suggest would be just the right ones for the leading men on that committee.

The Secretary. Mr. President, it is impossible for any committee to formulate what might be called an ideal or model charter. A committee might be got together that would suggest a charter that might be a little better than anything else in the State, and if they can do that, they have made a long stride forward. I think a committee might do something along that line. Every few months in California a board of freeholders is elected to form a new charter for a municipality, or some committee of the council is appointed to

suggest charter amendments. I have been frequently applied to for assistance and information as to where material could be gotten, and I have referred them to this Municipal Programme, and sometimes have written little things that I thought might be of benefit. There is certainly a desire for this very information on the part of freeholders and the municipalities generally, and some committee of this sort would accomplish something. It can at least point out the weaknesses of the present charters, and show them errors to be avoided. So I think much will be accomplished, and I am in favor of appointing a committee.

Mr. Parker. I desire to express my appreciation of these papers, which certainly have very great merit. At the same time I want to express my regret that the model charter has not appeared, because my own town is in need of a new charter, and I would like to take home something with me that will at least be fundamental.

Mr. Morse. I am somewhat of the same opinion. Neither Mr. Mason nor Mr. Kirkbride has ventured to pick out a charter and say "That is the one." We have gotten a number of very valuable points. I would like to see a committee appointed, so that we can have something, perhaps, more definite.

Mr. Kirkbride spoke of Brookline, Massachusetts. Brookline is surrounded by the city of Boston. The people there could not be induced to become a part of the large municipal corporation, because by doing so they would lose the right to settle their tax rate, and they almost all of them are wealthy people. In some of the Massachusetts towns, such as Brookline, they have the form of government that Mayor Frary speaks about, a mayor and two boards. The effect of it is that if one board gets a little too anxious to run the town, they cannot do it—the other one acts as a governor, to a certain extent. But for small cities, I do not believe we will get any really better form of gov-



ernment than we have in our sixth class cities in California. For myself, I would rather have a sixth class charter, as we have them, as I think it is preferable, with the exception that we do not have control of the schools. One thing that should be met, in proposing a new charter, in connection with the fifth and sixth class cities, though the sixth class cities really have more power, is that there should be some provision that men who spend so much time as do our council in Riverside, for instance, should get some compensation, as they really cannot afford to spend so much time year after year without it.

Mr. Peters. I would just like to throw out a suggestion. Would it be wise for the committee to recommend a single charter, or should they recommend two or three charters along radically different lines, and then allow any community desirous of adopting a new charter to have a somewhat wide latitude of choice? For instance, suppose they recommended one charter along the idea of centralization of power in the mayor, another along that Mr. Mason suggested, of putting almost all the powers in charge of the council, and possibly another combining the two, the one a check on the other.

A Delegate. I agree with Mr. Morse that the town should have all the power they can have. Mr. Morse speaks of the cities of Massachusetts. There they have their three selectmen or five, as the case may be, which amounts to our trustees, and they are elected in annual election. Sometimes a man is kept in office for 25 or 30 years under that plan. I know of a sheriff who has just finished his thirtieth year, and voluntarily retired. Those people can assemble (and I should think the same thing could be incorporated into the law here, perhaps), and do assemble for what they call their March meetings, and the levy of the taxes is in the hands of the voters of the town. They appropriate as much money as they see fit for the various subjects, for

their schools and buildings and bridge and roads and police service and protection from crime, and so forth, but must be put into the call for the meeting, called the warrant, and they cannot act on anything that is not in the warrant, the purpose of that being that everybody must have notice in the town that they are going to act upon that particular subject. The amount of money is not limited; it is simply a question of discretion in the hands of the voters. That acts very well in those towns, as I know very well, from actual experience.

Mr. Kirkbride. That was my idea.

The President. It seems to me that the papers read tonight were all of them very suggestive and able. I was particularly struck by the paper of Mr. Kirkbride, which seems to cover the subject thoroughly. He has evidently made a very careful study of it. I do not personally believe that a model charter could be made. I think the best plan would be to take the Programme and make suggestions with regard to it, adapting it to conditions in California. I do not see how you can do anything more than that. Mr. Kirkbride spoke about the necessity of arousing the civic conscience. I think that is the secret of the whole matter. The American people who live in cities have governments just exactly as good as they deserve, and no better. It is their own fault that there is not a better condition, due to their not paying attention to municipal matters, or to their dishonesty.

Mr. Kirkbride spoke of Edwin Burritt Smith of Chicago, and quoted from an article of his. I am acquainted with Mr. Smith, having met him last year in Chicago. Before I met him, I saw notice in the Chicago "Times-Herald" of an article published by him in the "Atlantic Monthly" on the best method of handling franchises by municipalities, that is, how they can best control franchises for public utilities, as for instance, city railroads. Mr. Smith was

particularly interested in that, because the franchises of the Chicago railroads were just about to run out, and it is a very serious problem with them. Chicago, as you know, has had about as corrupt a lot of alderman as you can find anywhere. This league of the executive committee of which Mr. Smith is a member, has devoted its attention largely to getting honest aldermen. It employed a man to watch the proceedings of the board, and publish a record of every vote that the man gave on every question that came before the board. Then, whenever anybody was nominated at an election, the people had the facts before them and might run down his whole history. If he had a bad record, they published the fact, and put him on the blacklist. The league became so influential that there was not a single paper in Chicago, not even the most corrupt, that was willing to advocate anybody that they blacklisted. And two years ago, when Mayor Carter Harrison was elected a second time, the league succeeded in electing a majority of 68 aldermen, so that they got control of their enormous board in favor of good government. And it was all through the work of that man. Every bad man was blacklisted, and they succeeded in getting every bad man out. I think that is an object lesson for us.

But to show how these corporations operate: They know well enough where the power is; they know it is in the people, and they try to get control of leagues of the character of the one of which Mr. Smith is the head. I went to see Mr. Smith a few days after I had read the article in the "Atlantic Monthly," and I was sitting talking with him in his private office about a matter of business that I had gone from California to attend to, and I was very much interested in having it attended to promptly. I had hardly got the subject opened before there was a knock at the door, and a clerk announced that Mr. So-and-so was there

and wanted to see Mr. Smith at once. Mr. Smith asked if I would excuse him, and I went out and waited and waited, and finally went out, stating that I would be in again in the afternoon. Mr. Smith said he knew I would excuse his apparent discourtesy, when I saw him again in the afternoon, if I knew what the matter was that he had been called upon. He told me that a solicitor of one of the biggest city railroads in Chicago, whose charter expires in about a year now, had come to him and said that he had read his article in the "Atlantic Monthly," and that they believed his scheme for municipal ownership and for having more control by the aldermen was a good one, and they wanted to know if they could not employ him to go to Springfield to get that put into the constitution. Of course, Mr. Smith did not accept the employment. He told me that he said to the solicitor, "You get your company, your directors, to endorse that system, and put it on your records, and then send a committee to Springfield to try to get it on the statute books, and I will see if our league will not send me there to back up your friends." It is unnecessary to say that they did not adopt the suggestion; I think they stood in with the other corporations.

As to the committee, I think it ought to be appointed, but I do not personally think it is feasible to attempt to make up an ideal charter.

Mr. Brock. I think this is the most important matter before the convention.

California is yet a young state. Her towns are springing up here and there and growing very fast, and they ought to start right in the matter of municipal government. It seems to me that it is too long to wait for a report from this committee, to put it at the date of the next convention, and I am inclined to think that a committee might take this article of Mr. Kirkbride's, and go over it carefully and get what they consider to be about the best in it. Each and every town will have to appoint free-



holders, and they can look into the details of the various features. But if the committee can get up what they consider a fair charter—we do not expect the best that we can get at the present time—I think much good will be accomplished. So I move as an amendment that instead of reporting at the end of the year, they meet as soon as they can, and that the result of their labors be published just as expeditiously as possible in "California Municipalities."

Mr. Keegan. I have no objection to the amendment. We might put it in the form that the committee is to report from time to time, and as frequently as possible, through the league journal. I am willing, if my second is, to have that incorporated as a part of the original motion.

Mr. Walsh. I do not think, Mr. President, that any committee that may be appointed can frame a charter suitable to all California towns. The conditions are different. We might want a charter in our town that would not suit your town. It seems to me that each charter convention can make inquiries all throughout the country. If you appoint this committee, the chances are that they will draw up a charter according to their own notions, and according to the conditions of the town in which they live.

The President. The question is upon the appointment of a committee of five, whose duty it shall be to prepare an advanced charter, and that they publish from time to time the results of their labors in "California Municipalities," and report at the next convention of the league.

The motion unanimously prevailed, and the chair appointed Messrs. Kirkbride, Morse, Mason and Keegan, and, upon motion of Mr. Keegan, President Hutchison was made the fifth member of the committee.

Thereupon an adjournment was had until the following day, Friday, January 10, 1902, at 10 A. M.

## What the Cities are Doing

Palo Alto has a new curfew ordinance.

Redlands will elect freeholders to frame a new charter.

Bakersfield is considering purchasing a fire alarm system.

San Diego officials are investigating the use of oil on streets.

The storm seriously damaged Santa Rosa sewage disposal works.

The Fresno Trustees have reduced water rates about 25 per cent.

Berkeley Trustees have conferred the title of Mayor upon President Marston.

Alameda has sold \$100,000 4 per cent High School bonds, at par and accrued interest.

Yreka has adopted a preliminary resolution for a bond issue of \$55,000 for water works.

Santa Ana has received bids for an additional pumping plant for its water works system.

Paso Robles is beautifying the town on an extensive scale by the planting of shade trees.

The President of the Los Angeles council has appointed a committee of citizens to revise the charter.

Winters has accepted its municipal water system constructed by Williams, Belser & Contractors.

The Petaluma water company has indicated its willingness to sell its works to the city at a price of \$218,000.

Ex-Mayor Eaton of Los Angeles has been chosen consulting engineer for the city water works commission.

Riverside has adopted plans for its new library building. It is of a modified mission type of architecture.

Emeryville is to have a city hall. There is enough money in the treasury to build one and no bond issue will be necessary.

Vallejo will hold an election on March 8 to determine whether or not bonds shall be issued for improving the water service.

San Bernardino has reduced the rates for electric lighting in that city about 30 per cent. The electric company will probably contest.

A bond election will be held at San Mateo March 8th, the propositions being the issuing of bonds for \$30,400 for bridges and \$5000 for land for a corporation yard.

The Union Savings Bank of Oakland "Craw-fished" on its offer to purchase the Pasadena Improvement bonds. The issuance has since been taken by the First National Bank of Pasadena.

Mayor Snyder has vetoed the franchise granted to the Huntington street railroad syndicate, which recently sold for \$152,000. The council sustained the veto. The main objection was that it granted freighting privileges over the city streets.

Boulder Creek has voted in favor of incorporation. The following officers were elected: A. L. Anthony, Clerk; J. H. Armstead, Treasurer; A. L. Seidlinger, Marshal; W. H. Dool, J. H. Fuller, I. T. Bloom, S. Hubbs, W. O. McAbee, Trustees.

Bond sales in February were: Rio Vista, \$20,000 water works bonds to Oakland Bank of Savings for \$21,875. Santa Monica, \$60,000 city hall and bridge bonds to Oakland Bank of Savings for \$65,682. Lompoc \$40,000 water and light bonds to Oakland Bank of Savings for \$41,360.



### More Carnegie Libraries.

The latest recipients of Andrew Carnegie's benefactories are the cities of Santa Cruz, Santa Ana and Pomona. Each of these cities has been presented with \$13,000 wherewith to erect a public library. California has up to date been the recipient of the following gifts from Mr. Carnegie. San Diego, \$50,000; Oakland, \$50,000; San Jose, \$50,000; San Francisco, \$750,000; Alameda, \$30,000; Fresno, \$30,000; Riverside, \$20,000; Eureka, \$20,000; Pomona, \$15,000; Santa Ana, \$15,000; Santa Cruz, \$15,000; Los Gatos, \$10,000. Total, \$1,055,000.

### Reports Received.

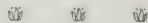
Annual reports have been received from J. D. Young, Auditor of the city of Sacramento, and from F. Wm. Gabriel, Clerk of Suisun city. The reports disclose a healthy financial condition of the two cities, and furthermore show that a good accounting system is employed.



### Newly Elected Officials.

#### RESULT OF VALLEJO ELECTION.

VALLEJO - Mayor, P. B. Lynch; City Clerk, T. J. O'Hara; Assessor W. J. Tormey; Treasurer, P. J. Murphy, City Attorney, James A. Lamont; Commissioner of Public Works, J. H. Fitzgerald; City Trustees, M. R. Alden, Samuel Lyttle, J. F. Deninger; Library Trustees, C. E. Walsh, J. F. Ward, J. H. Cooper; School Directors, John Davidson, W. J. Carlin, Frank Gorham. For new school houses, 673; against 223.



The January number of California Municipalities is much larger than usual, nearly all the space being taken up with the report of the proceedings of the late meetings of the League in Los Angeles. And those same proceedings were live and full of meat for thought. Every municipal officer in the state ought to take and read this magazine.—Redlands Citograph.



If your city is not already a member of the League, you should at once see that your council takes steps toward joining this union of California Cities.

## The Tracy Engineering Co.,

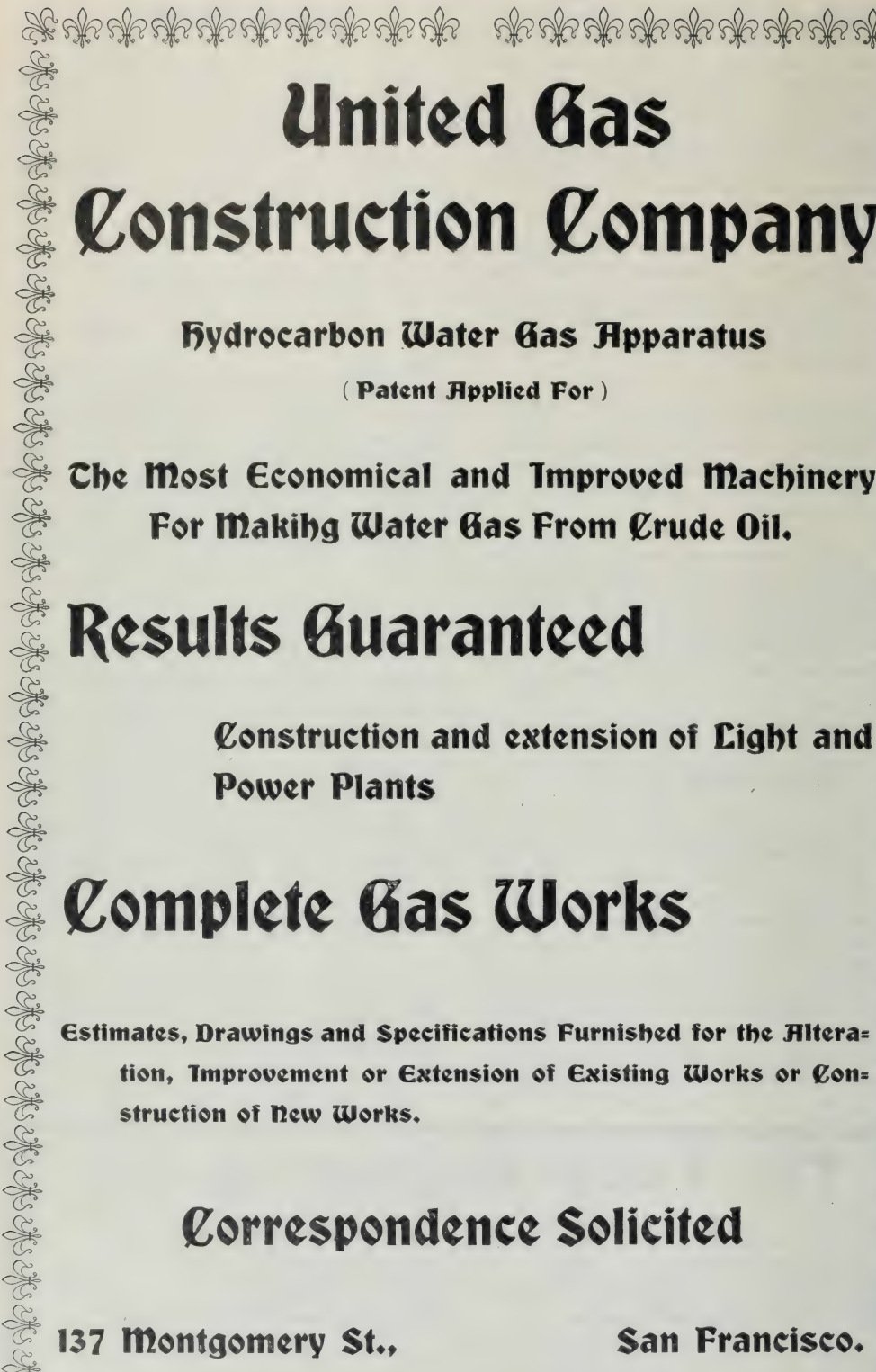
151 Fremont St., San Francisco.

Nordberg Corliss Engines.  
Allfree Automatic-Expansion Gear Engine.  
Shepherd High Speed Vertical Marine type Engine.  
Prescott Duplex Steam Pumps.  
The Tracy Automatic Damper Regulators.

The Tracy Steam Traps.  
The Tracy Cooling Tower and Condensing System.  
Wainwright Feed Water Heaters, closed type.  
Brownell Feed Water Heaters, open type.

Contracts taken for Complete Pumping and Lighting Plants. Plans and specifications and estimates furnished.





# **United Gas Construction Company**

**Hydrocarbon Water Gas Apparatus**

**( Patent Applied For )**

**The Most Economical and Improved Machinery  
For Making Water Gas From Crude Oil.**

**Results Guaranteed**

**Construction and extension of Light and  
Power Plants**

**Complete Gas Works**

**Estimates, Drawings and Specifications Furnished for the Altera-  
tion, Improvement or Extension of Existing Works or Con-  
struction of New Works.**

**Correspondence Solicited**

**137 Montgomery St.,**

**San Francisco.**



# CALIFORNIA MUNICIPALITIES

VOL. 6.

APRIL, 1902.

NO. 3.



GOODMAN PUBLIC LIBRARY, NAPA, CAL.

SAN FRANCISCO OFFICE . . . . .

ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

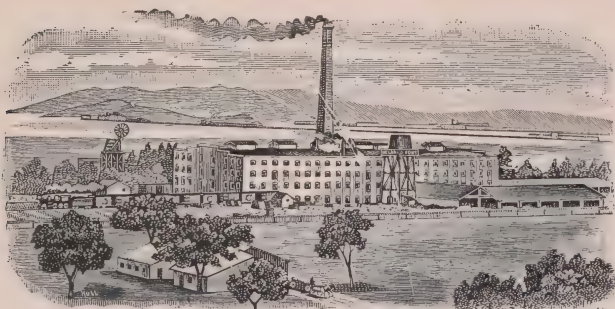
SINGLE COPIES, 10 CENTS.



TELEPHONE MAIN 771.

INCORPORATED JAN. 11, 1880.

# N. CLARK and SONS,



MANUFACTURERS OF

Sewer Pipe, Chimney Pipe,  
Caps & Tops, Architectural  
Terra Cotta, Hollow Tile Fire  
Proofing, Pressed Brick, Fire  
Brick, Tile, etc.

Office 17 & 19 Spear St.

San Francisco.

TELEPHONE SOUTH, 90.

## STEIGER TERRA COTTA & POTTERY WORKS.

MANUFACTURERS OF  
HOLLOW TILE FIRE PROOFING,  
SALT GLAZED SEWER PIPE, PRESSED BRICK,  
ARCHITECTURAL TERRA COTTA,  
HOLLOW BRICK, PAVING BRICK, DRAIN TILE,  
CHIMNEY PIPE & TOPS, FLOWER POTS ETC.

**FIRE BRICK**

W. E. DENNISON,  
PRESIDENT.  
J. W. McDONALD, JR.,  
SECRETARY.  
L. A. STEIGER,  
MANAGER.

Office and Yard: 1556 to 1564 MARKET ST.  
and 127 to 131 CITY HALL AVENUE.

Works:  
SOUTH SAN FRANCISCO  
SAN MATEO CO.

SAN FRANCISCO, CAL.

J. P. K. OTIS,  
President & Manager.

EDW. P. KING,  
Treasurer & Supt.

### UNION WATER METER CO.

## WATER

Worcester, Mass.

## METERS

Union Rotary Piston and Columbia Patterns

Pacific Coast Agent: G. FRANK OTIS, 440 So. Los Robles Ave., Pasadena, Cal.

38 SPECIAL—32 WINCHESTER

## Smith & Wesson's Latest The Military & Police Revolver

Perfect Workmanship — Accurate — Reliable —

Adopted by Police Forces—Recommended by U. S. Government  
Inspectors. Catalogue on application to

**SMITH & WESSON, Springfield, Mass.**

San Francisco Branch, 114 Second St.



# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 6. April, 1902. No. 3

## California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.

Office of Publication, - - - - - SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.



### CONTENTS.

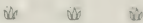
#### EDITORIAL.

Notes.....	87
Relating to Official Bonds—Secure the Highest Efficiency.....	88
Why Bonds for Street Improvement?....	89
Should Water be Served by Municipalities Free of Charge? .....	90
Municipal Government in the Phillipines..	93
Election Law.....	97
Municipalities Should Co-operate for Mutual Benefits.....	98
Street Railway Franchises.....	100
Development of Interurban Traffic.....	101
The Real Improvement .....	102
Cost of Incandescent Light—Diversity in Small Parks—Washington the Beautiful.	103
We'll All Call Him Mayor Turner Now—Poster Regulation.....	104
Better Than Vaccination.....	105
Alameda's Electric Light System Pays.....	106
Reasons for Defeating Assembly Constitutional Amendment No. 28.....	107

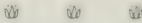
#### LIBRARY DEPARTMENT:

Library Situation.....	109
Goodman Public Library, Napa, Cal.....	111
Newly Elected Officials.....	112
What the Cities are Doing .....	113

An official cannot be the boss of the pie counter and a statesman at the same time.



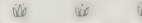
City Clerks will render a kindness to this office if they will report the results of the municipal elections as soon as possible.



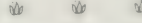
Fort Jones, Siskiyou county, is the latest addition to the League membership. This is a wise step and we hope that it will never be regretted.



The latest decision of the Supreme Court on the subject of elections is given this month and election officials will do well to heed the instructions therein given in regard to counting ballots.



A subject that the League could very properly investigate is that relating to the use of ballot machines at elections. It is very probable that that will be a subject of discussion at the next convention and possibly a machine or two can be obtained and a practical knowledge of its workings secured.



Chicago by an overwhelming vote has declared in favor of the municipal ownership of street railways, gas and all lighting works.



**Relating to Official Bonds** Things change by degrees. It is hard to suddenly abolish a custom that has been followed for centuries. We have to grow into new conditions. Just at the present time the custom of requiring official bonds for the faithful discharge of a public duty is undergoing a change, and a very significant change it is. Bonds are still being required, but instead of the official having to hunt up some personal friends who are willing to risk their money upon his honesty he goes to a surety company which take his risk for a consideration, which consideration is called a premium. But still another change is coming. The municipalities are commencing to pay those premiums out of the public treasury. This has been done by several cities. The proposed new charter of the city of Santa Rosa, requires that all bonds shall be furnished by a surety company at the expense of the city. This is a sensible step to take and the logic of it must be apparent. The people by electing officials express their satisfaction in their capability and honesty and the people should bear the expense of any risks that they have taken. Furthermore, an official who has had no worry getting bondsmen can be satisfied with a smaller salary. Another advantage is that the official is left free to conduct his office without the dictation of his bondsmen. Moreover surety companies insist that the municipality shall adopt proper accounting systems and this is a public gain.

With the practice of having premiums paid by the municipality once generally adopted it is easy to see the next change to come. A trustee of the newly incorporated town of Boulder Creek asks "Why official bonds at all?" The people who have elected their servants have vouched for their integrity

why should not the people take the risks themselves? Why should the municipality pay a private corporation to take a risk when the town is able to carry the risk itself. From a financial standpoint the town with a million dollars worth of property on its assessment roll is as solvent as a corporation with a million dollars of capital. The town can save money by carrying its own risk.

These questions will be brought home when the surety companies combine and raise their premiums. The suggestion will be emphasized when the same companies refuse (as they have already done in several instances) to pay their losses. The question will be asked: "Why should we pay for a security which is not furnished?"

Then the bond system will begin to disappear. And it will be just as well. When that time comes the necessity for a secure accounting system will be apparent and a system will be devised under which defalcations will be well-nigh impossible. At the same time the voters, realizing that they are bearing the risks will be more careful in the selection of their officials and the public will get a higher order of official integrity.

Possibly within ten years the official bond system will be abolished.



**Secured the Highest Efficiency.** The operation of public utilities by municipalities requires the exercise of high order of technical knowledge, which few municipal officials possess. Yet some of the most complex problems are brought forward for solution, questions involving the economy of steam, the relative effectiveness of water, steam, gas, electricity as applied to certain purposes, and the city officials are placed in a position of having to decide propositions without pos-

sessing the slightest degree of technical knowledge of the subject. Then a lot of bidders, each with his pet scheme, come forward and expatiate upon the merits thereof. And the smoothest talker, the biggest liar of the bunch, whose bid has the least merit not unfrequently gets the reward. So we have examples of some very inefficient power plants. We have engines incapable of carrying the desired load, electric generators that only half generate, a useless air compressor, a steam plant when a gas engine would do the work cheaper or vice versa. Now city officials could easily avoid these mistakes. There is no necessity of erring in judgment, because nine-tenths of the questions involved can be answered with mathematical exactness; they are simply questions in mathematics. All that is wanted in an expert engineer with a piece of chalk and a black board and the answers appear in figures that cannot be disputed. Therefore, city officials before adopting a system of water or lighting or before purchasing a piece of machinery should have just such an expert to pass judgment on the plans or efficiency of the machinery.

In this respect perhaps the League can be of some assistance. Send your plans and specifications to the Secretary. He will submit them to an expert in the proper line and the prominent defects will be pointed out.

\*\*\*

### Why Bonds for Street Improvement?

It is noticeable that several cities are talking of issuing bonds for street improvements. There are some serious objections to issuing bonds for this class of improvement, chief of which is that the improvement is of necessity a temporary one. The best of street paving is of short life—twenty years at most and before the bonds are

finally paid the work must be done over again. It is a class of improvement different from sewers, water works or municipal buildings, which endure a life time. If the policy of issuing bonds for street improvement be persisted in the result must necessarily be the creation of an ever increasing indebtedness that can never be liquidated. Is not the better way to levy a special tax and "pay as you go?"

The last legislature enacted a law designed to meet this particular condition. Under this act the voters may authorize a special tax not to exceed 50 cents on the \$100, which may be levied each year for a period of years and until the contemplated improvement is fully completed. Under this act it may take a little longer to complete the work, than it would under a bond issue, but when once done there would be no debt upon which to pay interest. In this respect it would be cheaper to the taxpayers.

\*\*\*

Attention is called to this act because city officials may have overlooked its existence.

\*\*\*

Rio Vista is the thirty-fourth municipality in the state to acquire water.

Lemoore is constructing the thirty-fifth public system and Yreka has agreed to purchase the works of a local company which will make the thirty-sixth. It won't be long before a privately owned plant will be a curiosity.

\*\*\*

A certain town paid a lawyer \$25 to prepare a proper form of ballot. For a postage stamp the same information could be obtained from the League. The town in question is one of the few towns in the state that "can't afford to join." As a matter of fact no town can afford not to belong to the League.



## SHOULD WATER BE SERVED BY MUNICIPALITIES FREE OF CHARGE?

BY J. W. KEEGAN, COUNCILMAN SANTA ROSA.

At the convention of the League of California Municipalities held in Los Angeles last January, the subject of the Municipal operation of public utilities being under discussion, the representative of the city of Santa Rosa, Councilman J. W. Keegan, stated that that city was supplying water to its cities without charge—that is to say the expense of operating the water system was paid by the taxpayer the same as any other municipal charge. Mr. Keegan was so beset with questions as to how such a scheme could be sustained and justified that the "time limit" was reached. At the suggestion of the president, Mr. Keegan promised to extend his remarks in the form of an article for this magazine. The following is the article.

The city of Santa Rosa, a municipality having nearly 7,000 inhabitants, has for over five years past operated a municipal water works system without charging or collecting a cent for all the water furnished to its inhabitants during that time, and has derived no revenue or profit therefrom. Furthermore, this policy appears to meet the approbation of the inhabitants as a whole. The charge having been made that the plan adopted by the city of charging the cost of supplying water to its citizens to the property of the taxpayers, it necessarily follows that if the charge be true the citizens who uphold this plan, are doing injustice. I would not be faithful to their interests, were I to permit such a charge to pass unrefuted, and so I will, so far as my ability permits, endeavor to sustain the affirmative of the question.

"Is free service the proper and just method of supplying water by a municipality?

Justice is a relative term and I shall not assert that supplying free water, under all possible conditions, attains a position of absolute justness, but shall merely content myself with endeavoring to show that it is a better method of serving this commodity than by the usual method of exacting payment

therefor from the individuals served.

Municipalities are organized for the purpose of rendering certain services to their inhabitants, that cannot be adequately rendered by individuals. If anyone will take the pains to study the growth of municipal functions, he will discover that the powers exercised by municipalities a hundred years ago were few in number and simple in their nature. In fact the functions exercised at that time related almost exclusively to keeping the public peace and to the care of the public highways.

Within the past century (or a little more than a century to be more accurate) we have added to the list of institutions supported by the municipality the following:

- Public Schools.
- Public Hospitals.
- Fire Departments.
- Sewer Systems.
- Public Libraries.
- Public Parks and Playgrounds.
- And a few other minor institutions.

The history of the development of these functions will show that at the time of their first inception they were not supported or maintained at the public expense, but that the individuals who patronized them or were directly benefitted by their establishment contributed towards their maintenance. A person sending his children to school paid for the benefits which he received; the owners of goods and buildings liable to be destroyed by fire paid the expenses of the fire department; hospitals, libraries, and even street lighting were primarily paid for by those particularly benefitted.

The reasons for changing the system from that supported by individuals to that supported at public expense were that better systems could be instituted, that an equality of sacrifice could be se-

cured by means of a uniform system of taxation and more important still, the benefits of these institutions could be bestowed upon the poorer classes of the community who could not, by reason of their poverty avail themselves of the advantages offered.

The student of the history of the growth of these public institutions will be struck with the opposition manifested at the time when it was proposed to convert them from quasi public institutions into full fledged free institutions supported solely by taxation. Most of us remember hearing our parents relate how indignant many people became when it was proposed to tax property for the support of the schools! "Why should I pay to educate some stranger's child?" was by many thought to be an unanswerable question. Yet time has answered the question completely, and it is no longer asked. A similar question was subsequently propounded when fire departments were about to be made a public charge. "Why should the land owner whose property cannot burn be taxed to protect the property of some stranger which is subject to conflagrations?" was at one time a most pertinent question. In turn these questions have been propounded. "Why am I, who have to pay for my own doctor, have to pay for a hospital for strangers?" "Why am I, who own property in town but live in the country, taxed to maintain a sewer system?" "Why should not those who read books pay for them, instead of asking me who can't read to pay taxes to support a library?"

These questions have all been conclusively answered. It is because the duty of the municipality concerns the well-being of its inhabitants. The fundamental purpose of the municipality is to have healthy, educated, happy and contented people. To secure this end, all means are justifiable. The rights of property are subordinate to the rights of the individual.

I am now asked the question. "Why should I be taxed that some stranger

may have water to drink, to bathe in and to irrigate his lawn?" This is the identical question, in a new form, that has been asked every decade during the past century.

My answer is: "Because the supplying of water is a public function and the cost of exercising a public function should be borne by taxation. Let those who think otherwise lay down a rule by which public functions may be separated into two classes, one to be supported by taxation and the other supported by private contributions. Let him who reads this try to formulate such a rule and I predict, in the language of the street that "he will be up against it." The arguments that can be used against a public water system supported by taxation can be used with equal force against the maintenance of fire departments, hospitals, sewer systems, libraries, schools and parks.

Mind you, I have assumed that the supplying of water to the inhabitants of a city is a proper public function. The discussion of that question is foreign to this paper. In this connection, however, I wish to suggest to those who believe in the municipal ownership of public utilities that the logic of their position must inevitably lead them to adopt the same position that I have assumed. I cannot conceive of a form of municipal ownership without the exercise of a public function; nor, as I have stated above, I can't conceive of a possible rule by which it can be determined that the exercise of some public functions must be paid for by private contributions, while others must be paid for by a system of taxation.

I furthermore suggest that the municipal ownership of any utility is not complete until its operation is paid for by taxation. Other forms of municipal ownership are only apologies—half way stations to the full realization of the advantages of public ownership and operation. From my standpoint, then, I am correct in asserting that Santa Rosa is the only municipality in the



state—perhaps in the United States—that has a municipal water system owned and operated by the public.

What are the advantages of a free water system?

In the first place it is more economical. The cost of accounting and collecting is done away with. I have looked over the reports of cities having so-called municipal systems and I find that the cost of keeping the accounts with consumers and the collection of water rates amount in many instances to over ten per cent of the entire operating expense. If this could be dispensed with the saving would be very material.

If this item of expense could be abolished there would be no question but that public operation would be cheaper than private operation.

One of the disadvantages of the rate system is the annoyance caused to consumers by the monthly appearance of the collector. Very frequently the ordinary householder has no money in the house when the collector comes, and it is at least humiliating to ask the collector to call again. Sometimes it becomes a confession of poverty and we should avoid placing our citizens in such a humiliating position.

Free water, especially in California, is a strong incentive for the beautification of our cities. In most cities people hesitate to plant flowers, lay out gardens and lawns, knowing that they will be taxed in the form of water rates for all such improvements. The poorer classes cannot afford such pleasures. With free water none are too poor to have beautiful gardens, an abundance of shade and green grass. Most of us recognize the civilizing and beneficial effects of such things. The value to the community, too, is great, for the place becomes more attractive to strangers, it is sought for as a place in which to establish homes, the population is increased, real estate values advance and prosperous business comes to the merchants and trades workers.

Furthermore, the very poor are bene-

fitted, those who would otherwise have to use water from shallow wells the waters of which are frequently impure and a source of infectious diseases which sometimes involve the health of the entire community. Certainly the community is a great gainer when all such sources of contagious diseases are for all time closed.

It has been suggested, however, that free water aggravates the matter of waste; that where a person gets something for nothing he will use it wastefully. Our experience in Santa Rosa has been, that while it is true that there is more waste than should be that the habit of wasting water is largely a legacy from the old system of charging for water at a stipulated price per month. The average consumer has always argued thusly. "I have to pay \$2 for water this month and I might as well get all that I can. I'll pay for more than I get anyhow." Consequently he has got into loose habits of using water not easy to break off. Municipalities that charge flat rates complain of the wastefulness of consumers fully as much as we do. Frugality in the use of water is a matter of education and I am sure that we can appeal more effectively to our people to be frugal than can cities where charge is made for water. The meter system frequently unduly restricts the use of water, so I am sure our system is as good as any in this respect. If we can dispense with meters we have saved a big item of expense. It is cheaper to submit to moderate amount of waste than it is to install and keep up a system of meters.

But let us for a moment consider whether or not any particular class of taxpayers are injured by the method of supporting a water system by direct taxation.

At first thought many persons might suggest that the land owner would not be benefitted, and hence injured by this method. Upon investigation, however, it will appear that the land owner

is benefitted. The establishment of a free water system is the same as bestowing a free water right to every square foot of soil in the municipality, and, as a consequence, the land is made more valuable. We know that in many parts of California water is more valuable than land. There are many instances where land can not be sold unless the water right goes with it. Take two lots, all surrounding conditions being the same with each, but one having a free water and the other not, the one with the water will be worth much more than the other, a sum equal to the principal upon which the cost of obtaining water would pay a fair rate of interest.

To illustrate: A's lot has free water; B pays ten dollars a year for water. Ten dollars a year is a fair rate of interest on \$100. A's lot is therefore worth \$100 more than B's. Two towns one having free water and the other not, may be compared in the same way. Public institutions, even though supported by taxation always add to land values. What would the land of a town be worth that had no schools, no police, no fire department, no public

institutions? It would be worth almost nothing, for who would live there? So the land owner will get his money's worth under a free water system.

The owner of improvements upon land will also get his taxes returned, for if he occupies his improvements he gets free water, if it is occupied by the tenant he gets increased rent.

The only man who may be injured is he who pays taxes on personal property, and he is no more injured than by a free sewer system. Yet if he be a householder, he has free water, and if his personal property is merchandise which he sells, he can shift the burden of taxation upon the purchaser and the purchasers of the goods pay the merchant's taxes, the same as he pays the merchant's clerk hire.

After all the real tax payers in a community are those who consume the products of labor, for taxes are, except those on the bare land, eventually shifted upon the shoulders of those who eat, wear clothes and pay rent. So in the end those who get free water pay the tax, except that paid by the land owner and he gets added value to his land, or increased rent.



## MUNICIPAL GOVERNMENT IN THE PHILLIPINES.

[CARL C. PLEHM, IN MUNICIPAL AFFAIRS.]

### THE OLD AND THE NEW REGIME.

It is not in the written law that we find a full expression of the true difference between the municipal governments now being organized in the Philippines and those which existed under Spanish rule. When we compare the "Municipal Code" enacted by the present United States Philippine Commission, on January 31, 1901, with the Royal Decree of May 19, 1893 (commonly known as the "Maura Law" from the name of then colonial minister, Antonio Maura y Montaner), the resemblances strike us more forcibly than the differences. The Maura Law was itself the result of many years of delib-

eration and experiment with the express purpose of reform, and the frame of government it decreed differs far more in form from that which existed before 1893 than from that which our commissioners have inaugurated.

The Municipal Code provides for the election of the administrative officers and of the council by restricted suffrage; so did the Maura Law. But under the Code the suffrage is broader. Both impose compulsory service upon persons elected to municipal office, with precisely the same exemptions. Both provide for election by plurality vote. The duties of those entrusted with authority are in many respects similar, as of course they must be since the functions



of municipalities are much the same everywhere. Of the sixteen sources of revenue granted to the municipalities by the Maura Law, the Code retains fourteen unchanged, merges one of the two others in one of those retained and rejects but one, namely, that fertile source of corruption, the *corvée*. To this already formidable list, the Code adds eight more, only two of which are, however, strictly new, the others having been levied by different authorities before. But the Code changes the emphasis by raising the land tax from an optional charge, of the nature of a special assessment, to a compulsory tax and by making that the mainstay of the revenues. Formerly many revenues were farmed out. This is now prohibited.

#### HOME RULE INTRODUCED.

The fundamental difference between the two plans of municipal government is not in the framework within the municipalities but in their relation to other authorities.

The Spanish system of government in the Islands was one of absolute central control and direction. There was no definite sphere of action within which the municipality was actually independent and the appearance of independence was a mere veneer. The American system does, to be sure, provide certain central restraints, but it preserves absolutely the independence of the electors and of their chosen representatives within certain clearly-defined limits, which are broad enough to include all the strictly local interests.

The Maura Law gave the provincial governor, an appointed official, power to revise elections and legislation within the municipalities and to suspend any or all local officers. Under the Code the power of suspension alone remains and that is vested in the central government only. It can be exercised solely in the event of certain clearly-defined offenses and then only after a proper hearing or due process of law.

But over and above this very exten-

sive power of the provincial governors to interfere in local affairs was the power and influence of the ever present parish priest. Church and state were one, and the priest was a regular agent of the central government. His labors on behalf of the central authorities began with the very election of the council which, as the Maura Law directs, was to be made by the resident electors with the assistance of the *devoto o reverendo cura parroco*. No act of the council was legal which was not countersigned by him, no appointments or contracts could be made, taxes levied or collected, or money expended without his approval, and no reports even could be rendered which were not signed by him as *intervenor*. He inspected the schools and prisons and his *visé* was upon all court and legal documents. In short, there was not a single act of the local authorities in which he did not play a part. He was the representative of the central authorities to instruct and guide the people in the performance of their civil duties.

The only feature of this elaborate system of supervision which the commission has retained is in matters financial. All the revenues from whatever source are to be collected by the provincial treasurers through their deputies, and those belonging to the municipalities paid over to the municipal treasurers. It is assumed that it will be necessary to appoint continentals rather than islanders to the posts of provincial treasurers and that in this way there will be an efficient supervision of the conduct of municipal affairs which will prevent fraud and waste. The provincial treasurers are also to audit the accounts of the municipalities.

In general the people will be left free to manage their own affairs and will thus be afforded the best possible opportunity to demonstrate their capacity for self-government and at the same time have an opportunity to learn both the advantages and the difficulties of free institutions.

## FRAMEWORK OF GOVERNMENT.

The Municipal Code establishes the framework of government for all municipalities in the Islands excepting the City of Manila, for which a special charter has been enacted. Under the Code's provisions, any group of inhabitants from a village of 2,000 upwards may be organized into a *pueblo*. Provision is made for the needs of the larger municipalities by granting them a larger number of councillors. There are four classes of pueblos according to size.

The government of each municipality is to be vested in a president, a vice president and a municipal council, of from eight to eighteen members, according to the size of the town, all being elected by direct vote. The electors are male residents of three classes: (a) persons who have held office prior to August 13, 1898 (the date of the surrender of Manila), (b) owners of real property to the value of 500 pesos, or who pay annually 30 pesos or more in taxes, (3) those who speak, read or write English or Spanish. The Maura Law granted suffrage to two classes only, the first was the same as the first above, and the second included those who paid 50 pesos on account of the income tax, that is, those who enjoyed an income of 1,000 pesos per annum. The electors under the older law were designated as *principalia*, and they chose the town council of twelve, who in turn elected the *tribunal*, consisting of the petty governor, or town captain, and his four lieutenants.

Eligibility to office is also greatly extended and now includes any qualified elector at least twenty-six years of age who can speak, read and write either Spanish, English or any local dialect. The Spanish law limited eligibility to natives and Chinese-*mestizos* (half-castes), thus excluding Chinese, Europeans, European half-castes and other non-indigenous races, all of whom are now eligible unless they are subjects of some foreign power.

The provisions of the Code as to the methods of holding elections, secret balloting and the like are closely modeled upon the provisions of our best American city charters and no description of them is necessary.

Under the Spanish regime the members of the municipal tribunal and of the council of twelve were unpaid, and service of those elected was compulsory unless the nominee could show as cause for being excused that he was over sixty years of age, was physically incompetent or had already served three terms of four years in a similar office. The captain was, however, allowed a secretary. The Code provides salaries for the president and for a municipal secretary and a municipal treasurer, both to be appointed by the president by and with the consent of the council. These salaries range from 600 to 1,200 pesos for the presidents, 300 to 600 pesos for the secretaries and 300 to 800 for the treasurers, according to the size of the municipalities. The commission has perpetuated the feature of compulsory service, under penalty of six months imprisonment, but lessens the number of terms of such compulsory service to two. As to the wisdom or necessity of this provision the future will teach us much. It is well to bear in mind that it is not safe to assume that office seekers are numerous among a people who are not of Teutonic stock.

## TAXATION.

Although, as stated above, the Code retains all but one of the old sources of revenue permitted under the Maura Law, yet the main reliance for the means to meet the increased expense of the pueblos is to be placed on the tax on real estate. This is, for the Philippines, a new and thoroughly revolutionary measure. The settled policy of the Spanish government, followed with scarcely a break throughout its entire history in the Islands, was to foster agriculture, not only by the entire exemption of the land from taxation, but



by special exemptions from insular taxes granted to persons engaged in cultivating the soil, the exemption of agricultural machinery from customs duties and by various bonuses. There are but few of the more important royal decrees or royal orders relating to taxation which do not in some form or other give evidence of this policy. This was part of the general policy of exploiting the Islands for the benefit of Spanish commerce. The resources of the Islands were mainly agricultural and in this line of development lay the best opportunity to build up a market for Spanish wares. But far more potent than the best of economic reasons in establishing and maintaining this policy was the political influence of the Friars, who, as the largest landholders, were especially interested in and benefited by this exemption.

The tax on real estate is to be *ad-valorem*, at not less than  $\frac{1}{4}$  of 1 per cent., which must be imposed by the municipal authorities for schools, nor more than  $\frac{1}{2}$  of 1 per cent, for all municipal purposes. The provisions for assessment, which is to be made by an assessment board composed of the president of each municipality, the municipal treasurer and a specially appointed deputy of the provincial treasurer, are very similar to the provisions of the tax laws in our continental states. Although this assessment, made by the local authorities, is to be the basis of taxation for the support of the provincial government, no provision has been made for equalization.

#### TWO LEADING INNOVATIONS.

Two of the provisions of the Code loom into special prominence, and, like all innovations, are more or less problematical. These are the elective system and the real estate tax.

From the experience of the past three years, there is abundant evidence that the popular franchise in Filipino towns will result in the selection of officials competent so far as knowledge and ad-

ministrative ability go, although it may be a generation or two before they rise to a very high standard of political honesty. But the great question to be solved in connection with any experiment with a popular elective system among an oriental race or a people of any race which has not enjoyed such franchise before, is whether the minority will be good losers, or will be inclined to resort to violence to enforce their opinions. In the same way there is danger that the majority will be tyrannical in the exercise of their powers. Against the latter danger a strong system of courts will provide an adequate safeguard. The prevailing opinion seems to be that success is assured and that the oriental is not especially jealous of his political rights. If not too much taxed, it is probable that he will be well content to let well enough alone.

The transplanting of our real estate tax to this new soil is probably the more serious experiment. Governor Taft in the report of the present commission to the President of the United States, dated Manila, November 30, 1900, says of it: "It is reasonably certain that at the outset there will be more or less opposition to this tax." This anticipated opposition was revealed very forcibly in the public discussion of the new charter of Manila which introduced a similar provision. Any new direct tax naturally creates opposition and it is usually supposed to be the part of political wisdom to rely on indirect taxes until the government is sure of the cordial support of the people. The proposed tax, if the full rates allowed to the municipalities and to the provinces are levied, will be more than twice as heavy as the highest direct tax imposed by the Spanish.

#### CHARTER OF MANILA.

The charter of the City of Manila was enacted by the commission July 31, 1901, just six months after the enactment of the general Code. The govern-

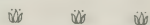
ment which it provides differs materially from that provided for the other municipalities, all the officers being appointed, none elected by the people. It is modeled in a very general way upon the government of the city of Washington. The original draft of the charter, upon which, however, the commission made a large number of amendments, was prepared under the direction of General Davis, who succeeded General Bell as provost marshal of the city, and it shows very clearly its military origin.

The government of the city is vested in a municipal board of three members appointed by the civil governor of the Islands, by and with the consent of the commission. This board exercises the usual legislative powers of a city council and administers the various affairs of the city through five heads of departments, namely: (1) engineering and public-works, (2) police, (3) law, (4) fire and building inspection, (5) assessments and collections.

There is an advisory board, consisting of one representative from each of the eleven districts, appointed by the civil governor. This board has the power to make recommendations only, but it is obligatory upon the municipal board to seek and obtain the recommendations of the advisory board on all matters of importance. There is also a special school board of six members.

The most striking feature of the charter is the total absence of any elective features. The people of the city are to be allowed no voice in the selection of their officials. The reasons for this are to be found in the fact that Manila is the seat of the insular government. The civil governor and the commission are virtually to rule the city. That this will insure a government of the highest order is certain. The government of Manila under military rule, and especially under the provost marshals, Generals Bell and Davis, was remarkably efficient. Law and order were well maintained, the city was clean and the

sanitary conditions excellent, public works and street improvements were prosecuted with vigor, and the resources of the city husbanded with economy. The charter perpetuates many of the main features of the military government, substituting the Municipal Board for the provost marshal, and the civil governor and the commission for the commanding general.



### Election Law.

The Supreme court in a recent decision has done a service to voters and especially to election officers in passing squarely on the question of irregularities that invalidate a ballot. The case is that of J. Salcido against J. W. Roberts, appealed from Stanislaus county.

**Election Law—Intention of Voter Not to Control—Identification Marks—Australian Ballot Law—Construction of.**—The courts in interpreting the election laws cannot confine themselves to the sole question as to the intention of the voter. The voter might, with the stamp, place a legal mark upon a ballot, and in a legal place, with the evident intention of marking the ballot for identification, but the ballot cannot for this reason be rejected. But, if he place an illegal mark upon the ballot it must be rejected. The controlling object of the legislature in adopting the Australian ballot law was to secure an absolutely secret ballot to the end that each elector may fully express his choice of the candidates to be voted for, uninfluenced by threats or intimidation, and that corruption at the polls may be prevented. Every positive requirement of the statute which, if disobeyed, would defeat its object, must be held mandatory. But such minor provisions as do not have that effect should be treated as directory, and a failure of the elector to comply strictly therewith should not be held to invalidate the vote, if the object and spirit of the law is not violated. All statutes tending to limit the citizen in his exercise of the right of suffrage



should be liberally construed in his favor, and every mark upon a ballot, which might possibly be used as an identification, does not necessarily demand that the ballot be rejected.

**Writing Name in Wrong Place—Balance of Ballot Legal.**—The statute expressly provides that any ballot not made as provided for in the act shall be void with two exceptions:

1. "Any name written upon a ballot shall be counted for the office under which it is written, provided it is written in the blank column, and, 2, if a voter marks more names than there are persons to be elected to an office, or if for any reason it is impossible to determine the voter's choice for any office to be filled, his ballot shall not be counted for such office." The statute nowhere says that writing a name in the wrong column shall invalidate the ballot, but the plain inference of the special provision is that the written name shall not be counted, unless written in the blank column. This is, in substance, to say that the ballot shall be counted for all other officers who are properly voted for.

**Election Law—Name Written Above or Below Line Valid.**—Where a name is written on a ballot under the appropriate heading under the title of the office, but is written across the horizontal line between the title, and not wholly in the blank space above the line, or is similarly written below the line, the vote is legal and should be counted, as the law does not require the line below the title of the office, and the name is in a legal place.

**Voting "Yes" and "No" on Constitutional Amendments—Balance of Ballot Legal.**—The only consequence of voting both "yes" and "no" to proposed constitutional amendments is that the ballot cannot be counted either for or against the amendments. It does not render the ballot void in other respects.

**Identification Marks—Cross Made by Folding Ticket not One.**—A ballot is not invalidated by a cross made by folding

the ballot before the ink has dried.

**Invalid Ballot—Two Names for Same Office**—Where a ballot contains a cross stamped opposite the name of a party for a certain office in the proper place, and it also contains another name written in the blank column under the heading for this office, it cannot be said for which party the voter intended to vote, and hence the vote must be rejected.

**Blurring by Stamp—Ballot Legal**—Where the instrument with which it is attempted to make the cross on the ballot opposite name of a certain party is too full of ink and thus makes practically a round spot or blot instead of a cross, but the ink is the same, and the size the same, as the various other crosses made by this voter, and the cross can plainly be seen through the blur, the ballot is legal and should be counted.



### **Municipalities Should Co-operate for Mutual Benefits.**

[An extract from an address by Allen Ripley Foote before the League of Ohio Municipalities.]

If the administration of municipal governments is ever to become as efficient as the managements of private corporations they must follow the same methods of development and improvement. All business men know the methods followed by great corporations to promote efficiency in the management of the various manufacturing plant or public service industries under their control. The central authority prescribes a uniform system of accounting and reporting which enables exact comparisons to be made of every detail of business management. There is no subterfuge possible in their system of accounting and reporting as to the cost of any operation or product. The commercial life of the organization depends upon its managers and knowing the truth. When this system of accounting and operation has been brought into

use the superintendents, heads of departments and managers are called to meet in frequent conferences for the examination and discussion of these reports. Each official is required to explain why the showing of a particular detail under his management is not as favorable as under the management of others. The accounting system being identical a manager cannot gain credit or escape censure by juggling with the figures. There they are, produced under an identical system, in every case, and credit or censure is given, not by favor, but by the records. Such comparisons lead to improvements whenever improvement is possible. The unfavorable showing is accounted for either by conditions for which the manager is not responsible or, if this is not the case, he is shown how to manage his work as efficiently as it is managed by others. If, after being shown how to do it he fails to bring his work up to the standard, he is relegated to the scrap pile along with other inefficient machinery. This is the penalty of incompetency in private business. It must be the penalty of incompetency in public business. A system that will establish the merit and guarantee the advancement of the competent will as surely expose the demerit and secure the removal of the incompetent. To enable municipalities to co-operate effectively for mutual benefit, the state must perform the functions of a controlling corporation, which it is in fact, and prescribe the system of accounting, and it must audit the same. In no other way can uniformity in accounting and reporting by all municipalities in the state be established. This done, the state should provide by general law for the expenses of a state organization of municipalities by authorizing each municipality to make an annual appropriation for its proportionate share, and to pay the actual expenses incurred in attending annual meetings by its superintendents, heads of departments, executive officials and delegates selected

from its council. Under such conditions every municipality would become a member of the state organization and would be represented in its annual meetings by the men who need to learn if anyone in the state is managing their special branches of the public service more efficiently than they are, and if so, how they do it. If the published reports show a greater relative cost in any department or for any item in one municipality than in others, the officials of the municipality will have opportunity to satisfy their competitors why the excessive cost is necessary in their case, or, failing this, they will learn how to cut down that cost. Either result will make for good government in that particular municipality.

The practical result of such comparisons and conferences will be to show that no municipality is best in all things nor none worst in all things. In some things each may be best and in some things worst. The essential thing is to find where the best work is being done, who is doing it and by what methods he has succeeded in excelling. Equipped with this knowledge, every representative can return to his municipality prepared to improve the efficiency of his department. From such work good municipal government is certain to be evolved. There is not an honest and intelligent mind in this state that can maintain that the benefits to be derived by municipalities from a system of accounting, reporting and conferences, such as is herein advocated, will not be productive of economies, improvements and benefits worth to the people an hundred times the cost involved. Talk about saving money for consumers by owning and operating public utilities! In this system of perfecting the administration of municipal affairs there is opportunity to save more money for municipal taxpayers than the entire net income of all the public service utilities operating within their limits. And there is still another value—this system will stimulate civic pride. It will make



it honorable for capable men to serve the municipality and will demonstrate their worth so they can afford to enter the public service as a profession, and devote their lives to the service of the public. This system will make it possible for men to learn to "work as well for public spirit and co-operative benefit as for private profit and loss."



### Street Railway Franchises.

[MUNICIPAL ENGINEERING.]

A recent decision of Judge John H. Baker, of the United States Circuit Court, on the right of the city council of Logansport, Indiana, to grant right of way to another street railway company over any street not already occupied by the company now operating in that city, is full of valuable points applicable to the control of all private corporations operating franchises for the use of city streets for any purpose. A full abstract of the decision is given in another department of this number. Special attention may be called to some of the most important features of the decision.

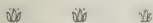
Many franchises for street railways, water and gas pipe systems, and the like, have been granted in indefinite terms, which have always been interpreted by the operating companies as giving them perpetual rights to the streets, and a few have definitely stated that the franchise is perpetual. While the general feeling has been that such a grant of power was not justified, it was long considered impossible to rescind a franchise already granted. The necessity of finding some way out of the difficulty has become more apparent as conditions have changed, and the opinion quoted is perhaps the most definite statement of the principle underlying the matter. The original grant is distinctly termed illegal, beyond the powers of a city council, and subject to modification at any time so far as its provisions thus transcend the legitimate functions of the city's governing body.

In this case there is no ruling upon the right of the street railway company to perpetual use of the streets which it now occupies. In another case a few years ago the decision was in the same line as the present, but not so far-reaching. In the earlier decision, the right of a city council to require approval by the proper authorities before extensions of lines could be made, was definitely sustained. In this case the right of a city to repeal a franchise, so far as the use of streets not already occupied is concerned, is just as definitely stated. This is quite a long step in advance, and, being made by so eminent an authority, is not likely to be retracted. Claims based on illegal grants of public rights, no matter what their assumed value or what the loss from their withdrawal, are to be regarded as no more valid, or are to have no more consideration than private contracts by unauthorized persons or those based on fraud. The reasoning which leads to this conclusion is sound, and is based upon the statements of fact, that the fee to the streets rests with the abutting property owners and the city is simply a trustee, for the purpose of operating the streets, and has no power to alienate the streets as it would were the streets the actual property of the city. The grant to the company of rights to all the streets in the city was simply an offer which did not become operative until the company actually occupied the streets, and could be withdrawn at any time before the lines were constructed. By the earlier decision referred to, the city has also the right to regulate the entry of the company upon new streets, and apparently can refuse permission so far as particular streets are concerned, even before the ordinance rescinding the franchise in general for such unoccupied streets is passed.

There are not so many cases in the operation of other public utilities to which the decision would apply as there are among the street railways, but the principles developed in the decision

would seem to be equally applicable where such cases occur.

Court decisions really reflect the predominant opinion regarding the justice of methods in vogue or which it is desired to make common, and the final form is usually the development from a long series of decisions each throwing some new light upon a detail, or giving some different point of view, but all reflecting the average of enlightened opinion up to the date of their utterance, with an occasional radical departure made by some one with a more than usual insight into the results of the popular trend, either in the line of that trend, or, if that is not correct, in departure from it toward the true course of justice. A few years ago consideration for the vested rights of corporations operating franchises prevented the correction of many abuses. The basis upon which such rights rest is more carefully considered in the later decisions and the justice of claims is considered with less reference to the effect of decisions upon property depending upon them.



### **Development of Interurban Railway Traffic.**

[MUNICIPAL ENGINEERING.]

In line with the discussions of some of the problems of interurban railway traffic, which have appeared in this magazine from time to time, is a paper on the competition of steam and electric parallels, by C. H. Davis, read before the Canadian Society of Civil Engineers, March 13. The paper was written some time ago, and its statistics are not brought down to date, but the general statement that observation shows that the general conclusions would not be modified materially by later information. A number of laws of passenger traffic are laid down, the definite results of which are not readily determined, though their general results are quite evident.

The total cost of travel for the round trip is an important factor, the travel in-

creasing somewhat less rapidly than the cost decreases. In this total cost must be included expense of getting to and from the railway line. In general the operation of this law is favorable to electric roads, their ability to take up and set down the passenger, with a minimum of extra cost being greater than that of steam roads. Another item must be taken into account in the neighborhood of large street railway systems. The uniform fare throughout the city limits which prevails in almost every city permits the development of all sections of the city at once. The imposition of an additional fare, no matter how small, puts a handicap on the growth of the section to which it applies. The removal of the extra fare induces an immediate increase in population which increases the traffic upon the railway line. A fare cut in half will very shortly much more than double the travel.

The time consumed in making the round trip is another factor deemed by Mr. Davis to be largely in favor of the electric road. This is true for reasonable distances where the trains on steam railroads are not too frequent. The time consumed is made up of the time spent on the railway car, the time getting to and from it and the time spent in waiting for the schedule time of the train to arrive. Where one train a day is run, the total time might be anything from the time spent on the train to 24 hours plus that time. The more frequent the trips the less the time lost in waiting for train after the decision to go is made. When the greater convenience of reaching the electric line is considered, the two may easily make up for a large excess of time on the electric road between centers, and if limited cars are frequent enough, the advantage of the electric line may be carried a long distance, say a hundred miles, under present conditions.

Mr. Davis's observation confirms the statements, heretofore made by the



writer, that the traffic on electric lines is almost entirely new, induced by the greater convenience and less cost and less total time consumed. Where the steam railroads lose traffic it is soon more than regained by the general development of the district largely hastened by the electric roads, so that the final result is distinctly of advantage to the steam road. In this connection Mr. Davis analyzes the contentions of the Connecticut railway companies in their efforts to restrain the building of electric roads and shows that the railroad companies have furnished the arguments to demonstrate that the electric roads will be a material aid in increasing their own business.

The operation of electric cars by the steam roads is suggested, the cars being run between centers of population on the regular railway tracks, fitted for electric cars, and running as local cars through the streets of such centers. Possibly this would be the best method, but a proper combination of local lines to pick up the passengers and occasional centers to transfer passengers to steam trains for transit between centers would seem to be capable of development into a greater system, and would retain the most advantageous features of both methods of transportation.



### The Real Improvement.

[FRESNO REPUBLICAN.]

City governments nearly everywhere are getting better. There is less dirt, less extravagance, less speculation, less arrant incompetency, more decency, more recognition of merit and less of pull—in fact, there is a distinct movement upward. Coincident with this movement has been the general adoption of city charters which concentrate and improve the mechanism of government. But no mere mechanism could

account for so great a change. Good government or bad can be had under any mechanism, and if governments are generally better it is because the people in general want them better. When, under the modern charters, the people elect a mayor as autocrat, they have by that mere fact worked no betterment, for the wrong man as autocrat would only increase the harm. But the people, quite generally, are electing men to city offices who believe in honest, economical and efficient administration of the city's business, and in a decent and impartial enforcement of the city's police laws. If the people elect such men, it is because they want such government.

But the governments, in their turn, react on the people quite as effectually as the people on the governments. "Every governmental act is educative." This is particularly true of city government. Every law enforced makes it more easy and natural to enforce other laws; every law ignored weakens all laws. We have seen this illustrated in Fresno. When Fresno was a "wide open town," there was a general superstition that nothing could be closed. The first efforts to enforce the rudiments of public decency were strenuously resisted by the indecent and were even looked askance at by the decent. Now that public vice is in some measure under control, it is beginning to be taken quite for granted that those things which would be a disgrace to an individual are not a credit to a city, and should be suppressed. How far the movement could go without causing a reaction against "puritanism" experience has not yet shown, but it has already gone further than would have seemed possible a few years ago, and nothing but good has come of the change.

Governments are getting better, because the public conscience is improving, and the public conscience improves still faster under the stimulus of good government.

### Cost of Incandescent Light.

An inquiry has been received from a city official as to the price paid for incandescent street lights in various towns.

Comparatively few cities use incandescent lights, the arc lamp being in more general use.

The following figures have, however, been obtained.

Auburn, \$1.50 per mo, 25 c. p. lighting schedule all night every night.

San Mateo, \$1.50 per mo, 16 c p, all night, every night.

Merced, \$1.10 per mo, 16 c p, all night, every night.

Dixon, \$1.25 per mo, 32 c p, all night, every night.

Pasadena, \$.70 per mo, 16 c p., all night moonlight schedule.

Suisun, \$2.25 per mo. every night till 12 o'clock.

Fresno, \$.60 per mo, no schedule given.

Sausalito, \$2.10 per mo,—c p., every night, 4 nights weekly to 12 o'clock and 3 nights till 1 A. M.

Chico, \$.60 per mo, c p, all night, every night.

South Pasadena, meter system 7cts per kilowatt.

San Leandro has a gasoline lamp system, leasing its own lamps and contracting for their care and the gasoline. The total cost, including repairs is \$1.60 per month per lamp. The light furnished is probably equal to four 16 c. p. electric lamps.

### Diversity in Small Parks

There is an important principle in the development of a small park system that does not appear to have received the consideration its importance merits. It is that of diversity. The general idea seems to center upon either a lawn with trees and shrubbery or a flower garden. While such are beautiful in their way and highly appropriate in many locations, the question is a broader one and really points to the study of each parti-

cular park in relation to its surroundings. In many neighborhoods a playground would be more beneficial, and even this should be considered in a particular and not in a general way. Provision for small children is more necessary in some localities than others, and should be furnished with suitable means for recreation and amusement. In other neighborhoods gymnasias for children of large growth may be appropriately provided; in others shady groves for simple outdoor music. Then again others may be devoted to wading pools. In a commercial and manufacturing city with crowded districts, the small park would not be separated by long distances, and would be diverse in character.

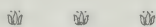


### Washington the Beautiful

The commission of experts appointed by the government to prepare plans for the improvement and embellishment of Washington has presented its report and the plans, including models and some 200 drawings were displayed for public inspection in Corcoran Gallery on January 15. They contemplate a project of improvement on a magnificent scale, which if carried out in their entirety, the prospects for which are are good, the result will be that Washington will unquestionably be the most beautiful capital in the world. Landscape art, architecture and sculpture are each given a large share in the general scheme, and the harmony which has prevailed between the congressional committee and the experts, and the general good will which has been evinced towards the project, have combined to produce results of far reaching public benefit. Never has the wisdom of selecting competent advice been more fully evidenced than in this work, and that in itself is a consummation most desirable in view of the several failures in the past. The report of the experts emphasizes the genius of L'Enfant, the man who under Washington



and his Secretary of State first planned a comprehensive scheme for the development of the capital and its surroundings, and although the improvements which have been made have not in many respects coincided with the original intentions, the report declares that the harmonies can be restored with comparatively little work and expense. The plans now contemplate the restoration of the principles of harmony between the Capitol and the Public Buildings, the creation of beautiful vistas, the improvement of the sites of monuments, museums, etc., the laying out of parks and pleasure grounds, and the liberal provision of fountains, canals and water facilities so essential to a city situated as Washington is in respect to climate. There is to be a large increase in the number of parks in the outlying part of the city, and the river front and the adjacent islands are also considered in relation to the whole project. With the Capitol and its surrounding grounds as a base the plans contemplate a design of harmonious details taking in the White House and Washington Monument, magnificent in extent and treatment, and this is to be extended to include a grand and artistic memorial to Lincoln worthy of a man and country. The American Elm is the tree selected for the avenues on account of its architectural form and its adaptability to Washington conditions.



**We'll All Call Him Mayor Turner Now.**

[MERCED SUN.]

A regular meeting of the city trustees was held last night. The usual number of bills were passed. The following resolution was presented by City Attorney T. C. Law, and upon motion was carried:

BE IT RESOLVED by the Board of Trustees of the City of Merced: That Whereas, our esteemed and respected friend and associate, W. H. Turner, has faithfully and acceptably served the

people of this city continuously as one of its trustees since the organization and incorporation of said city, in 1889, down to the present time, and has occupied the position and performed the duties of President of this Board since March 1894, in an able, efficient and fearless manner.

Now, therefore, as a recognition of the high esteem in which President W. H. Turner is held by this Board and as an act of appreciation of that zeal and fidelity which has inspired him in the faithful performance of all his official acts both as a member and President of the Board of Trustees.

It is resolved, That the title of Mayor be and the same is hereby conferred upon our President, W. H. Turner, and that hereafter he shall in all meetings of this Board be known and addressed as Mayor of the City of Merced, during his term as President.



### Poster Regulation.

The appellate division of the Supreme Court of New York has held that a Buffalo ordinance limiting the size of poster advertisements is valid. In accord therewith, Assemblyman Ladon introduced a bill imposing a stamp tax of one cent on every two square feet, except where the advertisement is displayed where the business is actually carried on. The advertiser is protected by a fine of \$5.00 upon every person who destroys or defaces a stamped poster.

Says the New York *Evening Post*:

"Criticism of the Landon bill must be chiefly of its conservatism. In France and Belgium posters are taxed progressively by size. In a general way the French taxes are from three to four times those proposed in the Landon bill. In Belgium the minimum rate is practically that which is to be tried in New York, but every increase in area beyond the statutory 196 (14 inches square) is so heavily taxed that very large posters are practically prohibited.

When the new law—for we must assume that so admirable a measure will meet no serious opposition in the Legislature—has been tried for a year or two, it will be easy to amendments, possibly such as should discriminate against the larger, and certainly more unsightly, class of painted advertisements. The important thing is to establish the principle that posters may and should be taxed. It is hardly necessary to argue further the proposition that he who offends the eye grievously is quite as amendable to restriction as he who offends the ear or the nose.

~ ~ ~

### Better Than Vaccination.

Mayor Tom Johnson, of Cleveland, seems ever to do the right thing in the right way at the right time. Dr. Martin Friedrich, whom the Mayor chose as head of the health department, thus tells the *Arena* how he, with the sanction and co-operation of the Mayor, wiped out smallpox, which had been raging in the city for a long time:

"It affords me great pleasure to state that the house-to-house disinfection freed Cleveland from smallpox. Since August 23, 1901, to every hour of writing, not a single case has originated in this city, but seven cases were imported. The disease had raged here uninterruptedly since 1898. We relied upon vaccination and quarantine as the most effective weapons to combat it, but in spite of all efforts it doubled itself every year, and was in a fair way of repeating the record of last year, as in 1900 we had 993 cases, and from January 1st to July 21, 1901, the number amounted to 1223. On this date I was called to take charge of the Health Office, with seventeen cases on hand. I had been in the city's employ ever since 1899, and it had fallen to my lot to investigate and diagnose most of the cases of smallpox that occurred in Cleveland. During that time, I observed that, after disinfection with formaldehyde of a house in which we had

found smallpox, never another case could be traced to this house.

"On the other hand, vaccination had given us many untoward symptoms. Frequently, it did not 'take' at all. One-fourth of all cases developed sepsis instead of vaccinia. Some arms swelled clear down to the wrist joint, with pieces of flesh as big as a dollar and twice as thick dropping right out, leaving an ugly, suppurating wound, which to heal took in many cases over three months. Finally, four cases of tetanus developed after vaccination, so that the people became alarmed, and rightly so.

"I laid these facts before Mayor Johnson, and proposed to stop vaccination entirely, and instead of it disinfect thoroughly with formaldehyde every section of the city where smallpox had made its appearance; also to give the city a general cleaning-up. The Mayor not only consented to my plan, but also gave me all aid needed. I formed two squads of disinfectors, preferring medical students for the work. Each squad consisted of twenty men, with a regular sanitary patrolmen at their head, and each man was provided with a formaldehyde generator. Thus equipped, they started out to disinfect every section of the city where the disease had shown had shown its head, and every house in this section, no matter if smallpox had been within or not, and every room, nook, and corner of the house, special attention being paid to winter clothes that had been stored away, presumably laden with germs. It took over three months to do the work, but the result was most gratifying. After July 23d seven more cases developed, the last one August 22d.

"In order to give an adequate idea of what we did here to get rid of smallpox, I have to mention the investigation department, consisting of physicians who were thoroughly familiar with every phase of the disease. They were day and night at the disposal of the Health Department. They had to investigate every suspicious case in town, and



whenever they found a case of small-pox they asked the patient the following questions:

"Who visited you during the last two weeks?

"Whom have you visited during the last two weeks?

"Have you been at any public meeting during that time, and who was present, to your knowledge?

"Where do you work?

"Where do the children attend school?

"Where does your family attend divine worship?

"This information obtained, they started out to all the indicated addresses. They asked the foreman, preacher, and teacher for all absentees during the last month from shop, church, or school, and then visited the house of every one of them. They 'phoned their findings to the Health Office, and disinfectors with formaldehyde generators were kept ready to follow the step of the investigators and disinfect where there was the slightest suspicion of exposure to smallpox. Along with this, the regular sanitary police force was given orders to make a house canvass to tell the public to clean up their yards, barns, and outhouses, and abate all the nuisances that could be found. As a result of it, Cleveland is now free from smallpox, and from the worst infected city it has become the cleanest."



### Alameda's Electric Light System Pays.

[ALAMEDA ENCINAL.]

The statement of President Forderer as to the facts in the case of the city's electric light plant, is so clear and so convincing, that the wayfaring man (or newspaper men either) even though a fool or a rascal, can see the truth without difficulty. Mr. Forderer has cited the facts that are easily obtainable. He has simply shown what the city would have had to pay to a private company for lights generated as ours, and demonstrates that even at a cost lower than is charged anywhere else, our plant is on

a paying basis.

At a stroke of the pen, he clears away the cloud of sophistry and misrepresentation which the invidious foes of the plant have invoked from manifestly interested motives, and gives the citizens who are paying for the plant such a plain statement of facts that there can be no further controversy. All that is needed is to cite these facts, and the enemies of the plant must hide their heads. They have had the field to themselves for some little time, and have been able to build up a mass of misrepresentation, not to say downright falsehood, that really might seem colossal to any one not conversant with such things and with the motives that inspire them. But Mr. Forderer has dissipated all this like the mist before a summer sun, and not a thing is left upon which to hang a shred of "argument" against the municipal plant. It is of course too much to hope that the campaign of misrepresentation will cease. That is not to be expected. It will now be necessary to take some other tack.

But in the meantime, the people of Alameda can rest assured that *the plant was never in better condition than now, that the city is getting its lights far cheaper than any other place in the State, and that the institution is on a paying basis. That is enough for awhile.*

Mr. Forderer's report is as follows:

"To the Members of the Board of City Trustees: The report which was made at our last meeting with reference to the financial condition of our electric light plant has caused considerable discussion among our citizens in general, through whom I have learned that the truth of the subject is not known, and I therefore make the following financial statement of the past nine months of the fiscal year:

#### VALUE OBTAINED BY THE CITY.

Cash from private consumers . . . . .	\$9,929 00
Lighting streets, City Hall and Fire Houses; 104 arcs at \$7.50 each	
per month for nine months . . . . .	7,020 00

Incandescent lights equivalent to 159 arcs at \$7.50 per month for nine months .....	10,732 00
Supervision and maintenance of Fire Alarm .....	700 00
	<hr/>
	\$28,381 00

DISBURSEMENTS.

Operating expenses, including salaries, supplies for Electric Light plant and Fire Alarm System ..	\$17,752 00
Repairs to Plant .....	3,188 00
Construction or additions to plant (see below) .....	6,046 00
Interest raised by taxes on Electric Light Bonds .....	420 00
	<hr/>
	\$27,406 00
	975 00

Add Extension of Plant by construction as above .....	6,046 00
---	----------

Balance in favor of City, showing profit earned .....	\$ 7,021 00
---	-------------

City Clerk Gillogly has compiled a complete statement of the finances of the Electric Light Department from July 1, 1901, to April 1, 1902, and the figures are eloquent of the success of the department. The total of disbursements for nine months was \$26,943.45 and the electric collections amounted to \$9,959.45.

Clerk Gillogly figures that the cost of one arc lamp per month has been but \$4.31, undoubtedly lower than anywhere in the State where steam is used.



### Reasons for Defeating Assembly Constitutional Amendment No. 28.

The joint committee of the San Francisco Board of Supervisors and the League of California Municipalities have just started a campaign of education against Assembly Constitutional Amendment No. 28, and have issued 10,000 circulars giving reasons why said amendment should be defeated. Following are extracts from this circular:

For years there has been in this State a strong public opinion favorable to the abolition of the State Railroad Commission. Instead of giving expression to this sentiment the Legislature proposes

to create a bigger Commission, with a larger jurisdiction and many times more expensive to maintain.

All attempts that have been made to regulate rates for services and commodities furnished by what are called "Public Service Corporations" have been inglorious failures; this must always be so, because in order to fix just rates, consideration must be given to the value of the works the capital invested, bonds outstanding, cost of operation, etc., and these facts can only be established by the evidence of the corporation to be effected, and there is no way by which this evidence can be disputed.

Occasionally, however, reduced rates of water, gas, etc., have been secured by local Boards of Supervisors or City Councils because of the power existing therein to grant franchises and to exact conditions connected with the use of public streets. Thus in 1900 the San Francisco Board of Supervisors secured a reduction in the gas and water rates in 1901 secured a half-fare for school children upon the street railroads. It is safe to assert that no State Commission would have done as much as this.

This amendment will be submitted on November 4th, 1902. If adopted, the present Governor will have the appointment of the first commission. His appointments, it will be noted, do not merely hold "until the next election," as is the customary provision in the case of appointments to elective offices, but hold for the entire term of from two to ten years. This extraordinary power is subject to severe criticism. Furthermore, the terms are inordinately long (longer by six years than any other elective officer except Justices of the Supreme Court), so that it will be six years before the people can possibly change the majority of the Commissions first appointed. Moreover, one-fifth of the people can express no views upon the policy of the Commission until the expiration of ten years and another fifth until after the expiration of eight years. This, in itself, ought to be suf-



ficient to condemn the Amendment.

This Commission is to have an unlimited authority to appoint employees. It is not responsible to the legislature, the Governor or to the people. It has in this respect, greater power than has the legislature. Moreover, it is a violation of the fundamental principles of a republican form of government, merging as it does Executive, Legislative and Judicial Powers, thereby creating a bureaucracy in its most objectional form.

It can hold its sessions anywhere and the State pays all traveling expenses (hotel bills are necessarily traveling expenses). There may be a month's session at the Yosemite, another month at Lake Tahoe, another session at Mt. Shasta, with winter sessions at Del Monte and Coronado. The "traveling expenses" will be no small item.

Rates can only be fixed after notice and full investigation and hearing. In determining what were proper rates in the case of the Contra Costa Water Co. vs. The city of Oakland, the Superior Court spent four months in having a full investigation of the subject-matter. As there are approximately 400 corporations within the jurisdiction of this proposed commission, at a like rate of speed in investigation, it will take more than 100 years before the rates of all such corporations would be once fixed. To meet judicial requirements, testimony must be taken in each individual case, so that it will be readily seen that it is an utter impossibility to "fully" investigate all of these public service corporations.

It deprives all incorporated cities and towns of the right to operate any public utility. It deprives cities and towns, now owning and operating water works and light works, of the right to own and operate them. They are forbidden to supply said commodities and such public works are to be turned over to this proposed commission to be operated, thus virtually robbing the people of the city of the property acquired and which

they are taxed to support. Furthermore, it is generally admitted that the most potent factor in keeping rates reasonable at the present time is the right of cities to own and operate their own utilities. When rates are exorbitant, there is created a public demand for municipal ownership. Take away this right and practically nothing remains to deter the increase of rates to the most exorbitant figure. This provision is evidently the "joker" in the proposed Constitutional Amendment.

It can only enforce its decisions and correct abuses through the medium of the Courts. We know how powerless our Railroad Commission has been to accomplish the lowering of railroad rates. Had there been any desire to improve matters, this language would not have been re-enacted. In plain terms, this means that the proposed commission will be as powerless to accomplish good results as has been the Railroad Commission, and that it is not intended that rates for any public service will be reduced.

The imposition of this license fee by the State necessarily operates to prevent cities and counties from imposing a license fee on the same corporations. This will deprive cities and counties of needed revenue and to this extent local taxation will be increased. The corporations affected will probably not contribute to the public treasury as much as they now do. In other words, burdens of these corporations will be lightened at the expense of the tax-payers.



The Town of Rio Vista has purchased the water works of a local company for \$3250. The balance of the bond issue of \$20,000 will be used for extensions and improvements. This makes the 34th municipal water system in the State.

The civic section of the Town and Gown Club of Berkeley is preparing to beautify the town by tree planting. It is intended to have the trees set out in a scientific manner by a man recommended by the botanical department of the University.

## Library Department

### The Library Situation.

The outlook in the free public library field is much more encouraging than it was a year ago. This improvement is in large measure directly owing to the gifts of Mr. Carnegie, which, in California alone, amount to over a Million Dollars. His gifts to libraries in all other localities for the past year exceed Thirteen Millions. History records no single instance of such unstinted giving for this cause of popular education, and it is pleasant to note from the continued flow of donations that the labor of wisely giving library buildings seems as if just begun.

Since the first of this year a change in the manner of giving may be seen in that many donations are being made to small places—some of which have certainly had their applications on file for a long time.

If we analyze Mr. Carnegie's plans, we notice that they have been framed with marked wisdom and Scotch shrewdness. He avoids all appearance of paternalism, as would suggested if he gave site, building and endowment to a city. Instead of this he proposes to help a place by giving a building, *providing* the place will help itself by furnishing the site and thereafter maintaining the library by a stipulated yearly support.

These plans are far reaching; they contemplate the good of generations unborn. They are closely in line with the thought of Dr. O. W. Holmes when asked, "At what age a child's education should begin?"; his reply was, "A hundred years before he is born."

It is impossible that these great donations should be made without increasing to some extent in the public mind a sense of the educational value of a public library. But much more remains to be done in this respect. While it is

true that "It is only the ignorant who despise education," it is equally clear to those who understand the conditions of rural California that the worth of public libraries is not generally realized. In evidence of this it may be seen that there are now less than 60 free libraries in the whole state; there should be twice that number.

Washington lived before the day of free libraries, yet was it not with prophetic understanding that he urged in his farewell words, "Promote then, as an object of primary importance, institutions for the general diffusion of knowledge."

The chief hindrance to the starting of public libraries in California is the general apathy of the public. In places where no library exists the average person looks upon it as a luxury, and argues that as *he* did not have the use of one in his youth his children do not need it. This is a huge mistake; the times have changed, and the children brought up in towns which have no good public library will lack the breadth of scholarship and preparation for business walks of life which those who use libraries will surely possess.

It is true that our excellent system of school libraries is of the highest value in implanting a taste for reading. But as the average appropriation for the library fund is only about \$20.00 per district, only a beginning can be made which should be supplemented by the ampler purchases of the public library. Only think a moment of what the children may thus have: Story books for the little ones; Volumes of discovery and adventure for stirring boyhood, and fairy tales and Folk Lore for the girls; Elementary Science such as electricity, mechanics and botany; Works on Insect, Bird and Fish Life; Biographies, History, Literature and delightful fiction for the youth of both sexes,—these are only a part of what may now be had, for there is a wealth of fascinating, wholesome books now published for young people.



There is an old legend that by the side of every cradle stands a good and evil fairy, who by their gifts make up the life of the little babe within. The good fairy gives them a wonderful blessing, perhaps it is the power to write poems, or paint pictures, or build a cathedral.

Then the bad fairy, ugly little sprite that he is, adds a portion of evil. And so they alternate the good and the evil, until the sum of human life is made up. We may be sure that in these Twentieth century days the good fairy would bestow the use of a fine library as part of the "Wonderful Blessing."

Today there is no institution in the United States which so stands for broad-education of children, youth, adults, the masses of our land, as the free library.

Why is this so? Because the public library has wide-open doors. Being supported by a general tax the library is owned by the whole people, boys and girls, young men and young women, and those of every older age are welcome to its rooms. In all other matters we divide in our choice; we do so in church life, in clubs, fraternal orders, and in social customs, but in the free library we meet on the common plane of learning from the best books that have been written on all topics of human interests. In the words of an accomplished leader in library work, "The function of the library as an institution of society is the development and enrichment of human life in the entire community by bringing to all the people the books that belong to them."

Let those who are skeptical on this subject visit the cities where good libraries are in operation and carefully examine their workings and we will be content with their verdict.

As the free library stands to-day for the highest education of the community in our own great mining state, as well

as in all others, one is reminded of the words of a noted writer, "An uneducated person is like a man walking over veins of rich ore, without pick or shovel with which to secure the riches beneath his feet."

What then is the duty of the hour? Is it not that the local boards of trade, women's clubs, public spirited citizens, preachers and newspapers take up the subject and champion it in season and out of season? Create a strong public sentiment in its favor. Write to CALIFORNIA MUNICIPALITIES for copies of A. L. A. pamphlets, "Why Do We Need a Public Library," and "How to Start a Public Library," and they will be sent to you free. Read the provisions of the new library law.

Note that when a petition of twenty-five per cent of the legal voters of a city for a free library is presented to the city authorities, they *must* (not may) by ordinance establish and support one by general taxation.

Begin this work without delay, so that a levy for the library may be made this very year. In your petition be sure to ask for as large an appropriation under the law as your best men deem wise. Let the year 1902 be the birth year of free libraries in all our California cities now unprovided with them.

If your town has already a library which is poorly supported, circulate a petition asking the city authorities to give a substantial increase of its income for the next year. The new library law allows cities of the fourth, fifth, and sixth classes to levy two mills on the dollar for this object—instead of one mill as in the old statute.

When you have done your full duty in this regard, then give thanks to the Almighty that you have been permitted to help a great cause, the cause of popular education, in the best land under His shining sun.



**Goodman Public Library, Napa California.**

The Goodman Public Library at Napa is now completed, furnished, and open to the use of the public. The generous donor, Mr. Geo. E. Goodman Sr. has left nothing undone that would conduce to the comfort and interest of every one.

The building is located on one of the pleasantest streets of the beautiful little city of Napa, near to the business center, readily accessible, yet apart from the noise of traffic. It is constructed of

desk supplied with materials for letter writing, should any one so desire. The parlor on the right opens into the lunch room, which with the gas stove and china closet a cosy lunch can be set. This department was established by Mr. Goodman for the use of the country people, and is to be sustained always by the city. Country people may rest here on coming into town and leave their wraps and bundles, etc., with the matron who is in charge of this department. In the rear is the



INTERIOR, PUBLIC LIBRARY, NAPA, CAL.

white sandstone, is two stories high, and is admirably lighted from numerous large plate glass windows and by electricity at night. It is heated and ventilated according to the latest modern methods.

On entering, one is at once impressed with the cosy homelike atmosphere of all the surroundings. The wide hallway is furnished with comfortable chairs. On the left an arch doorway leads into a parlor in which is a writing

spacious billiard room free to all, and is always filled with interested patrons both old and young. The janitor of the building is in charge of the social rooms.

A beautiful stairway leads up to the library floor. The finish of the building being of polished white cedar, here the artistic effects are very pleasing.

The Library rooms have been furnished from the library fund by the trustees, under the immediate direction of Mr. Jno. T. York the City Attorney



of Napa, who is a member of the Library Board, and an enthusiast on Library matters. This gentleman has exercised admirable taste and judgment in his selection of the furnishings of the rooms. The bookstacks are the latest pattern of metallic shelving now in use in all modern libraries.

The office is equipped with a patent desk of light oak, with polished wood office chair to correspond, a new Smith Premier type-writer and chair, and a portable electric light. The reading room is furnished with heavy polished oak tables, rubber tipped bent wood chairs, tasteful wallracks of maple to hold the papers and periodicals. Pictures adorn the walls, and cases of specimens are being added to the room.

The Accession Book registers about 7000 vols. The History section being the largest in the room. Special reading lists are in preparation. The Abridged Dewey Decimal system is the one used.

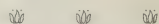
The various classifications are indicated by color labels, with corresponding colored book-cards. The librarian is desirous of making the children's section the most attractive in the room. A pure fresh book for a little child is a treasure to be sought for and appreciated.

The book committee is directing its selections towards the best standard literature. The Woman's study club has done much to influence the literary tastes of the town for good and profitable reading, and the Library Board gladly responds to any request for literature the members present.

A Natural History Club is doing much to keep up the interest in Nature studies.

That a library is not a luxury but one of the necessities of life, the spirit of progress in Napa is growing to appreciate, and that its utilities are endless and priceless. For a man has no amusement more innocent, more sweet, more gracious, more elevating and more fortifying than he can find in a library. "A library is the strengthener of all that

is great in life and the repeller of what is petty and mean.



The Riverside Press calls attention to the fact that this is the month for holding town meetings in all New England, meetings at which all the voters turn out to do local politics and to hear and know what public business is to be done and how it is done. God bless those town meetings! They have been the nurseries of American statesmanship and *The Register* wishes that the system established in New England might never have been departed from anywhere in the land. It is complained that nothing can be done in a public meeting. So it can not in a public meeting not trained to do business, but a New England town meeting does it up brown. There is no lack of public interest in public interests there, and there is more honor in being moderator of a New England town meeting than in being a congressman from California. *The Register* has no demagogic belief in the infallibility of the will or wisdom of the people, but it does know that there is no better safeguard against extravagance and dereliction in public office than being held to a close accounting in a public meeting accustomed to hear and determine all public matters. Bossism can not thrive where the New England town meeting system of government obtains.—Weekly Tulare Register.



### Newly Elected Officials.

MARYSVILLE—Mayor, L. C. Williams, Councilmen, T. J. O'Brien, J. P. Heyl, N. V. Nelson, P. J. Divver; Marshal, J. A. Maben; Assessor, F. B. Stanwook; Treasurer, W. C. Swain.

SALINAS—Mayor, Wm. Renison; Councilmen, P. Steigleman, — Jamison, H. Breese; Treasurer, J. W. Rowling.

SANTA CLARA—Trustees, D. O. Druffel, L. Kimberlin, A. E. Osborne; Clerk, Geo. J. Fenton; Marshal, D. A. Toomey; Treasurer, E. P. Stanley.

SANTA ROSA—Mayor, M. J. Bower; Councilmen, Messrs. McDonough, Brown and King; Clerk, C. D. Clawson; Attorney, M. T. Vaughn; Treasurer, J. M. Carter; Street Commissioner, J. H. Brackett; Marshal, Geo. Severson; Recorder, W. P. Bagley.

## What the Cities are Doing

Watsonville will elect a Board of Freeholders to frame a new charter.

Redlands will soon vote on a bond issue of \$50,000 for street improvements.

Grass Valley is preparing to make extensive improvements to its water system.

Santa Barbara has appointed a Park Commission to take charge and develop a park system.

San Mateo has authorized a bond issue of \$35,400 for bridges and for a corporation yard.

By a vote of 138 to 43 Yreka has authorized a bond issue of \$55,000 for municipal water works.

Santa Ana has selected a site for its Library building on the corner of Sycamore and Fifth Streets.

Redwood City has contracted for another well to be put down in order to increase its water supply.

Santa Monica will vote on the question of imposing a special tax of ten cents on the \$100 for repairing the wharf.

Pasadena's \$300,000 4% improvements were sold to the First National Bank of that city at par and accrued interest.

Chico has imposed a license on physicians, and as the consequence of their refusal to pay, they are all under arrest.

Donations from Andrew Carnegie for library buildings for March were: Santa Rosa \$20,000 and San Bernardino, \$15,000.

The Board of Trade of Kern suggests the improvement of the city's streets and a possible bond issue of \$10,000 for this purpose.

Chico will be ready to let the contract for sewer construction in a short time. Bids for material are now under consideration.

The women of Santa Rosa have organized an Improvement Club, following the example of the ladies of Sonoma and Petaluma.

C. B. Vincent and John Cravan have been awarded the contract for constructing storm water sewers in the City of Stockton.

Los Angeles expects to expend over a quarter of a million dollars within the next six months in the extension of its water system.

Vallejo's water works improvement bonds amounting to \$90,000 have been sold to E. H. Rollins & Sons at a premium of three per cent.

Eureka's sewer and high school bonds amounting to \$115,000 have been sold to the Oakland Bank of Savings at a premium of \$3950.

The Redwood City Improvement Club favors a large amount of street paving and improvement and suggests a bond issue to provide therefor.

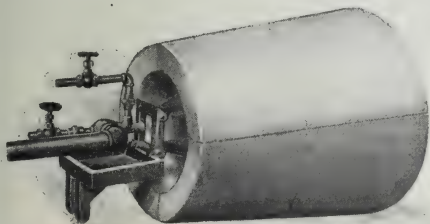
A road oiling plant is to be installed at Vacaville. One-third of the expense will be paid by the town and the remainder by the county. City streets and county roads will be oiled.

Alameda's delivery wagon tax designed specially to apply to Oakland merchants has been declared invalid, and the city will lose considerable revenue.

Suisun is preparing to macadamize a number of its street this summer. The work will be done under the provisions of the Local Improvement Act of 1901.

The City of Los Angeles is considering the purchase of the property of the Highland Water Company and thus secure the entire control of the water supply in the city.

Bakersfield will hold a street fair the first week in May. One day of the week will be recognized as "Municipal Day" and all municipal officials are cordially invited to be present.



## BURN OIL

**A new system. Perfect combustion.  
Highest Evaporation.**

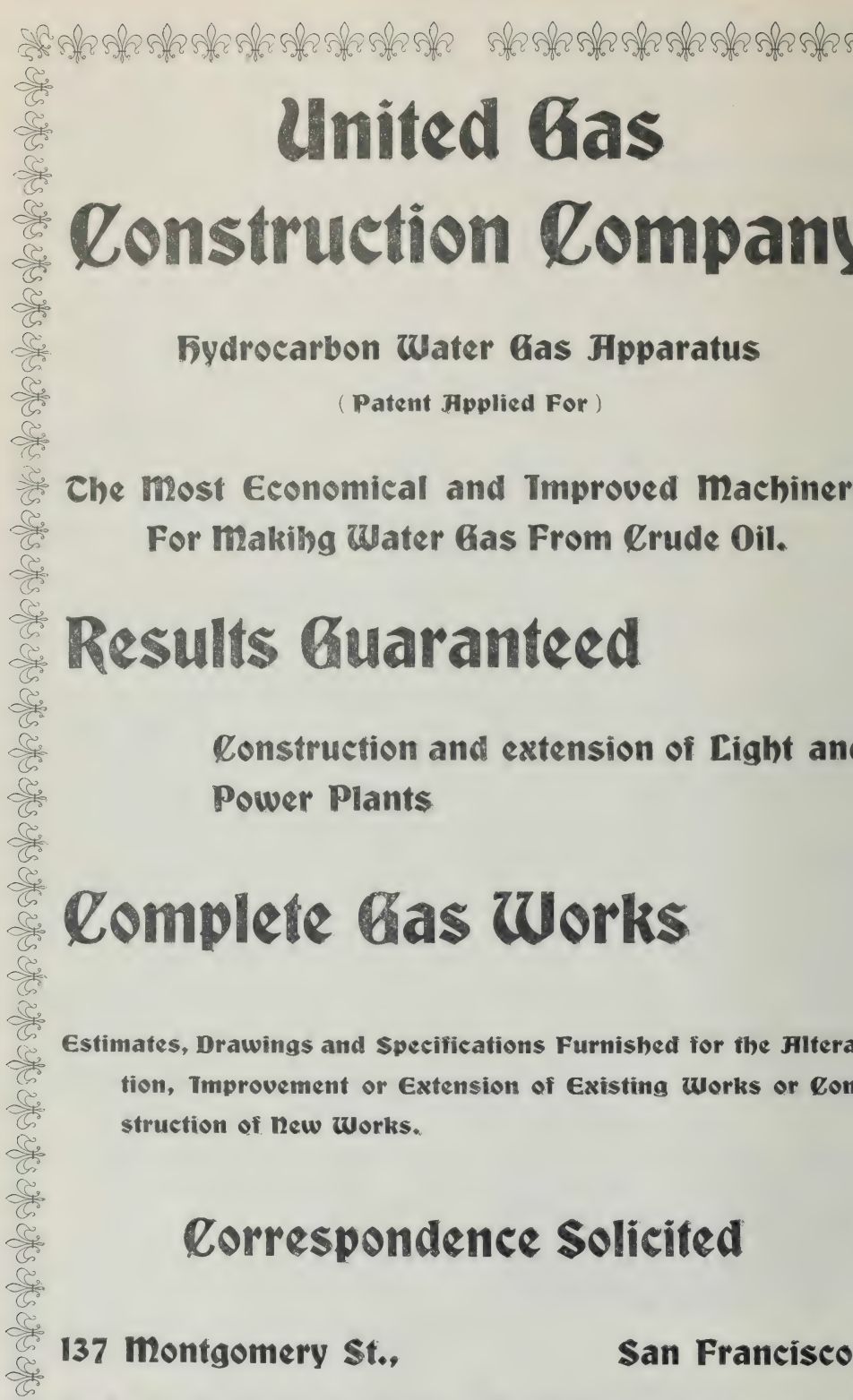
**Write for Particulars and Tests**

Send us data of your present performance and get our guarantee of saving or proposal to install our system for the saving.

**Tracy Engineering Co.,**

**151 Fremont St., San Francisco**





# **United Gas Construction Company**

**Hydrocarbon Water Gas Apparatus**

**( Patent Applied For )**

**The Most Economical and Improved Machinery  
For Making Water Gas From Crude Oil.**

**Results Guaranteed**

**Construction and extension of Light and  
Power Plants**

**Complete Gas Works**

**Estimates, Drawings and Specifications Furnished for the Altera-  
tion, Improvement or Extension of Existing Works or Con-  
struction of New Works.**

**Correspondence Solicited**

**137 Montgomery St.,**

**San Francisco.**



# CALIFORNIA MUNICIPALITIES

Vol. 6.

MAY, 1902

No. 4.



SCENE IN GOLDEN GATE PARK, SAN FRANCISCO.

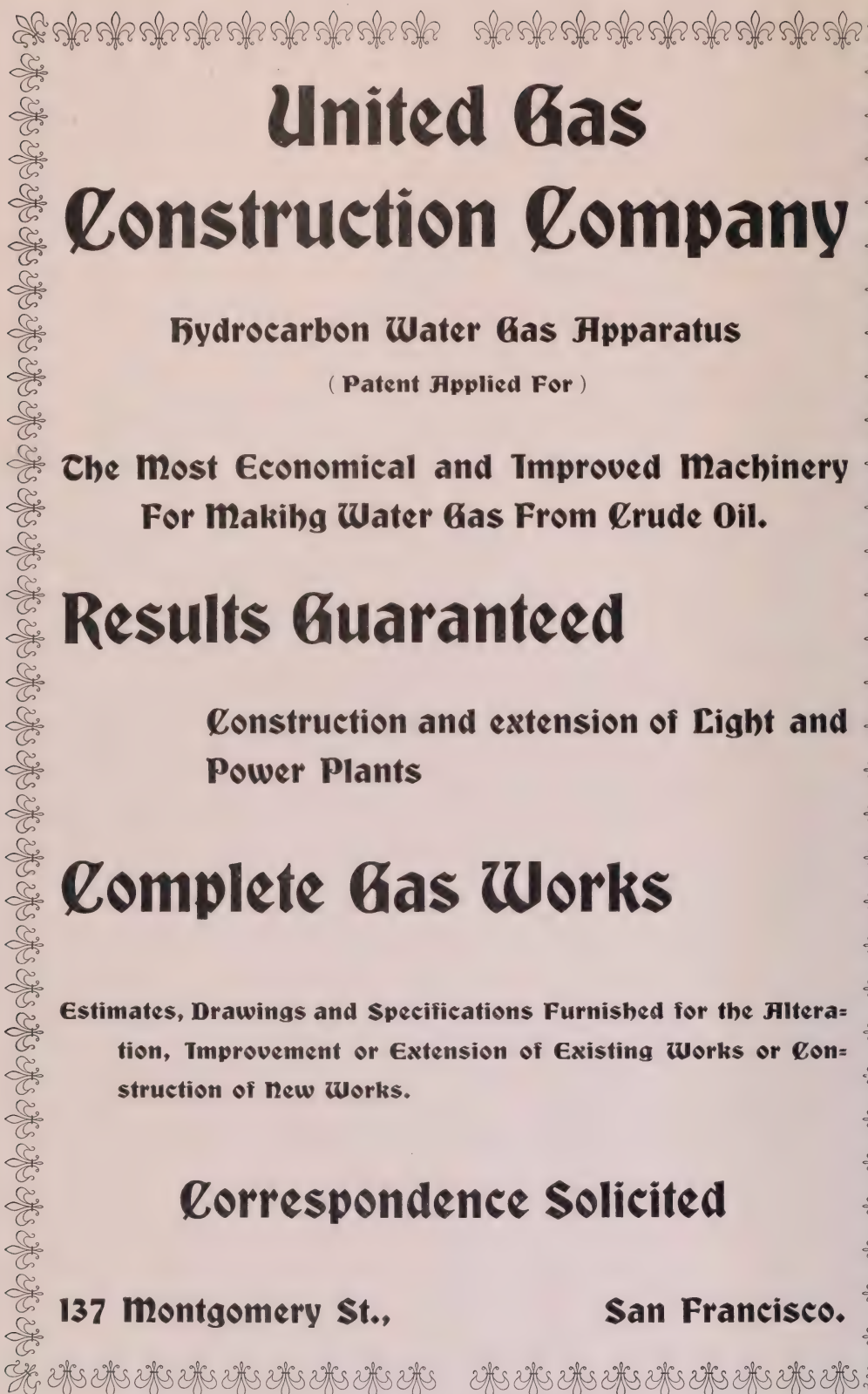
SAN FRANCISCO OFFICE . . . . .

ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.





# **United Gas Construction Company**

**Hydrocarbon Water Gas Apparatus**

( Patent Applied For )

**The Most Economical and Improved Machinery  
For Making Water Gas From Crude Oil.**

## **Results Guaranteed**

**Construction and extension of Light and  
Power Plants**

## **Complete Gas Works**

**Estimates, Drawings and Specifications Furnished for the Altera-  
tion, Improvement or Extension of Existing Works or Con-  
struction of New Works.**

## **Correspondence Solicited**

**137 Montgomery St.,**

**San Francisco.**

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 6. May, 1902. No. 4

## California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.

Office of Publication, - - - - - SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.



### CONTENTS.

#### EDITORIAL.

Notes .....	119
Compulsory Accounting and Reports .....	120
A Few Words of Advice .....	121
Septic Tanks for Sewage at Vancouver .....	122
Utility of an Independent Audit of Public Accounts .....	123
Reasons Why Public Bonds Should be Exempt from Taxation .....	124
The Town's Opportunity .....	125
Burnt Mud for Highways .....	127
Uniform Accounting in Iowa—Cost of Traction .....	129
Oil Macadam Specifications—Practical Men vs. Dreamers .....	130
Speed Regulations for Automobiles .....	131
Closing Up—Washington the Beautiful .....	133
Newly Elected Officials .....	134
Campaign Against Billboards—City Owner- ship of Telephones—First Public Wash House in Pittsburgh .....	137
A California Commission .....	138
Direct Legislation—The Mattern Oil Patent .....	140
The Model Town at St. Louis .....	141
Supervisors Resolutions .....	142
Faults in Municipal Government—A Park of a Government Reservation—Per- sonal .....	143
The Need of a Tree Warden—Conifers in Golden Gate Park .....	144
What the Cities are Doing .....	145

Calistoga is the latest addition to the League. This makes seventy-five members and the century mark will soon be reached.



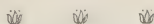
In the general revision of lists of city officials to whom this magazine should be sent, by reason of changes resulting from recent elections it is very likely that some mistakes have been made. All city trustees, city clerks, city attorneys, city engineers are of right entitled to receive it; also any other city official desiring it. Please call the editor's attention to any error or omission.



Dennis Kearney has been resurrected. The associated public service corporations have secured his services as a stump speaker to advocate the adoption of the notorious Assembly Constitutional Amendment No. 28, which places the fixing of the rates for all public services in the hands of a state commission and takes away from municipalities the right to operate all public utilities. He made his opening address on the streets of San Jose on the evening of May 24. His address was bombastic and calculated to deceive the unthinking, but as the people have long ago learned to



distrust the ancient agitator the words he utters will have but little effect. It is well, however, for the people to be warned against him.



Do municipalities ever get the benefit of cash discounts in the purchase of supplies? We know that a great many merchants sell goods with the proviso "two per cent discount if paid in ten days." Sometimes the discount is much larger. Are municipalities in a position to get this discount? If not, why not? In a majority of cases, there is money on hand to pay a bill the moment it comes in. Also, in a vast majority of cases the bill is held for several weeks until the finance committee meets and a lot of red tape is unwound before the bill is finally paid. In the mean time the time limit for discount has expired. Can not this system be changed so that a bill that bears a discount be paid immediately? The saving would be small it is true, but men in private business count these savings as clear gain and why should not a municipality do likewise?



**Compulsory Accounting and Reports.** In how many cities and towns in this state, can it be ascertained in five minutes time how much municipal money has been expended for a given purpose during a particular period of time? In how many cities and towns in this state can it be ascertained from any intelligent business man how much his town expended in support of a particular department during the last fiscal year?

This is equivalent to asking "How many municipalities have adequate accounting systems and how many issue intelligent annual reports?"

The test of an accounting system is to be able to tell at a moment's notice the precise sum expended for any purpose

during any period of time.

The test of a system of reports is to ask some citizen to give you the cost of sustaining some municipal department during the last year. He may not answer it off hand, but he knows where he can get the last annual report which will give the necessary information.

Now to answer the questions asked: So far as the writer has been able to ascertain there are not to exceed twenty municipalities in the state out of one hundred and twenty that have adequate accounting systems and publish satisfactory annual reports. This is not a very creditable showing. Still it is a much better showing than could have been made two years ago. At least ten towns have "reformed" in this respect during that time and every little while some other town is added to the list.

Now an adequate accounting system is essential in order to permit a trustee or councilman to perform his duties satisfactorily. An intimate knowledge of past expenditures is essential before one can begin to plan economies for the future. To be sure, a man may gain a little temporary reputation as an economist by "kicking" at every bill that comes in; but in the end he will make a nuisance of himself. The true economist studies expenditures in the concrete; he studies each branch of service, the expenditures for different purposes and measures the results that have flowed therefrom. If the results are inadequate he can economize either by increasing the results or by decreasing the expenditures. In order to practice economy one should know the results of expenditures in other cities; hence the necessity for approximate uniformity in systems of accounts and almost exact uniformity in the form of reports.

Now in order to secure this uniformity there must be some central authority to prescribe forms and enforce them. It

may be necessary to appeal to the legislature for a compulsory law requiring uniform accounting and a public report of municipal expenditures.

We believe that such a law will be worth \$100,000 a year to the taxpayers of this state. Not necessarily that it will decrease expenditures to that extent, but that it will secure an additional output of results—increased public service and efficiency in administration



**A few Words of Advice.** More than eighty municipalities in this State have recently elected new officials, and a couple of hundred of men have been chosen to administer public affairs for the first time in their lives. These men if they are intelligent, earnest and awake to responsibilities of their new position will not find their duties trifling. They will be called upon in many instances to solve important problems; to a great extent the future well-being of their respective communities is in their keeping. The problem as to how they can advance the material well-being of their constituents is one of gravest importance. How this can best be done is a matter for them to decide.

The only advice to be given in this connection is to Do Something! Do not let your terms expire without having accomplished something that will endure and have an influence for good upon the community. There is a wide field for the exercise of your activities. Can your Fire Department be made more efficient? Can some street or streets be permanently improved? Can the health of the town be conserved by the enforcement of health ordinances or by the construction of a sewer system? Can a city or town hall be erected? Can a public library be established? Or perhaps it would be a good thing to have a system of municipal water or lighting works? How about beautifying

the city? Can the town be made more attractive?

These are all important questions and and by addressing oneself to one or two propositions they can be worked out and at the end of your official terms you may, if you labor earnestly have something to which you can point with pride and be able to say (to yourself) "my efforts secured that." You may serve but one term, but that term may be long enough for you to erect a monument that will be regarded with affection by those whom you have served.

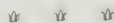
Don't fritter away your time in trifles.

Newly-elected city clerks will find much to do in the improvement of an accounting system, the arrangement of the books, papers and documents so that all information which they contain will be available at a moment's notice. Pay close attention to the matter of assessments. Be prompt in duty and obliging to all.

Newly-elected officials will find the League of California Municipalities of great use to them. From the Bureau of Information they can get information on almost any municipal subject. By attending the conventions practical knowledge of many things can be secured. By reading this little magazine and other publications one can observe as to what is going on in other cities and keep in touch with municipal progress.



Very satisfactory annual reports have been lately received from Modesto, Merced and St. Helena. Modesto's report is in pamphlet form and has been widely distributed.



It is a paying investment to beautify the town, besides being the best advertisement the town can have.



## SEPTIC TANK FOR SEWAGE AT VANCOUVER.

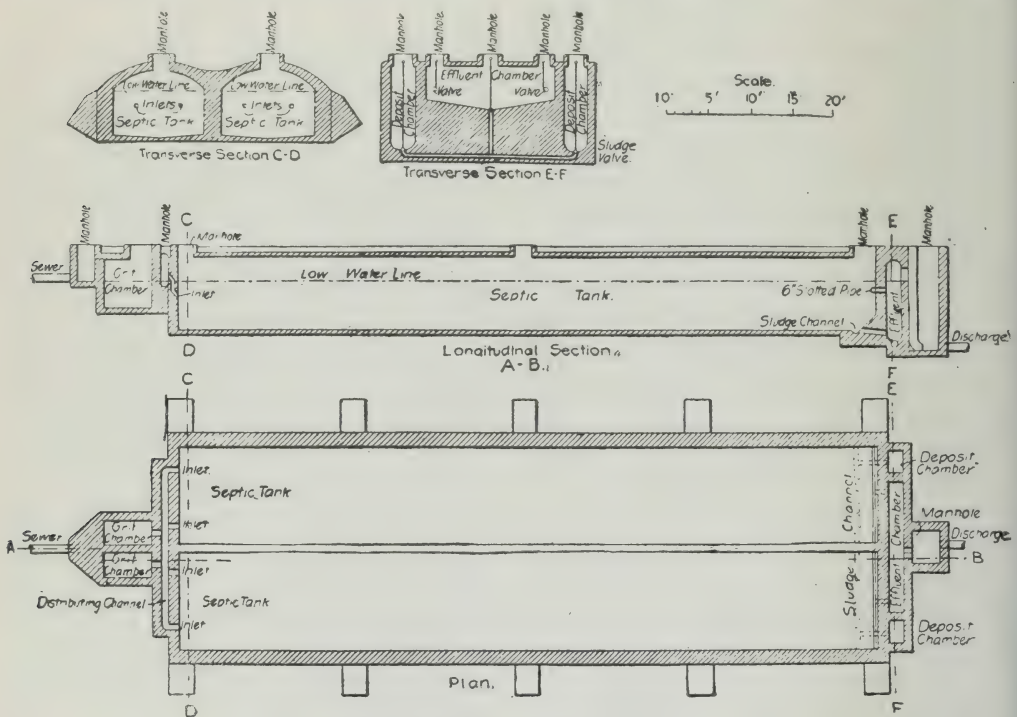
## MUNICIPAL ENGINEERING.

The city of Vancouver, British Columbia, is situated on the south shore of Burrard Inlet and the east shore of English Bay and is almost divided into two portions by a small arm of the sea known as False Creek, which extends from the bay parallel with Burrard Inlet to within half a mile of the eastern limits of the city.

Prior to 1899 one sewer discharged into English Bay and there were four

Various forms of bacterial filters were suggested, also septic tanks with or without filters, and in March, 1899, Mr. James F. Garden, C. E., mayor, and the city engineer were deputed to go and examine the tank in operation at Cnampaign, Ill., designed by Prof. A. N. Talbot of the State University of Illinois.

The result was so satisfactory that on their return they recommended the council to adopt the system where sew-



SEPTIC TANKS, VANCOUVER. B. C.

sewer outlets into Burrard Inlets, but no sewerage was provided for that portion of the city which would naturally drain into False creek, a great portion of which was tide flats. In order to sewer that portion it was necessary to provide some means of treating the sewage before discharging it into the salt water to prevent it becoming offensive and depositing any sewage matter on the tide flats.

age was to be discharged into salt water with current not sufficient to carry it entirely away.

Plans were obtained from Prof. Talbot, but the Septic Tank Syndicate having obtained letters patent in Canada threatened, through their agents, to institute legal proceedings if the city adopted the system without paying them. The city solicitor finally advised the city, in order to avoid litigation, to

accept the terms of the syndicate to supply plans and necessary iron-work fittings for the sum of \$1,500 for three tanks of capacities of 2,000, 3,000 and 5,000 inhabitants, respectively.

The tanks were built of concrete, arched over with the same material, and were put into use about the beginning of 1901. The accompanying drawings show the general features of the design of the tank designed to serve 2,000 people. The chambers are each 84 feet by 12, and 6 feet deep. For 3,000 population each of the two chambers is 92 feet by 14 feet, and 7 feet deep. For 5,000 population, three chambers are provided, each 102 feet by 14 feet, and 7 feet deep. These dimensions allow for about 6 cubic feet per inhabitant, or about 18 hours' sewage. The drawings show the tanks as constructed according to the plans of the syndicate. They might be simplified somewhat, with advantage.

Some slight changes were made from the plans furnished by the syndicate so as to do away with any woodwork in the construction, the influent and outlet channels being arched over and all the manholes (iron) carried up to the surface. The surface was covered with earth levelled and seeded and is not in the least unsightly, only the manhole-covers showing at the surface to distinguish it from an ordinary lawn.

After being in use a short time a slight scum formed on the surface which increased during the warm weather, the purification of the sewage becoming more decided as the growth of the scum, in which the bacterial action is principally carried on, progressed.

The best results so far appear to be attained with the largest tank near the crematory, into which five or six loads of night-soil a week are dumped, the scum on the surface of this tank being much thicker and the effluent clearer than from the others in which the sewage is more dilute.

From our experience thus far we are satisfied that septic tanks are sufficient

in most cases for sewage purification, where the discharge is into salt water or streams which are not used for water supply, and where necessary to use filters to obtain more thorough purifications, they increase the capacity of the filters by destroying the greater part of the solid matter of the sewage.

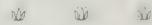
Mr. Thomas H. Tracy, city engineer of Vancouver, has very kindly supplied the information in this article, and the drawings from which our illustration is made.



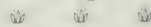
### Utility of an Independent Audit of Public Accounts.

The report on the investigation of Boston's Public Buildings Department, published in this issue, furnishes another illustration of the utility of an independent audit of public accounts. No person has any right to complain of the amount of taxes he is called upon to pay if he does not insist upon a proper accounting of the way in and purposes for which his money is expended. If he does not care how it is expended, how can he expect those who spend it to care how much they compel him to pay?

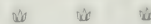
A study of audited reports will satisfy taxpayers that money is made by saving it in public as well as in private business, and in no other way. If it is not saved it is not made.—Public Policy.



Through the efforts of the Woman's Civic League of St. Paul, that city recently had a week's rest from the smoke nuisance. At the end of the week the cry went up that enforcement of the smoke ordinance might drive manufacturers over to Minneapolis, and the city returned to its smudge.



Binghamton, N. Y., has an official bridesmaid and groomsman to wait upon elopers.



Paris has a street paved with glass. It is clean and affords horses a good foothold.



## REASONS WHY PUBLIC BONDS SHOULD BE EXEMPT FROM TAXATION.

The following proposed Constitutional Amendment was adopted by the last Legislature, and will be submitted to the voters of the State for their ratification or rejection at the election to be held in November, 1902.

### STATE CONSTITUTIONAL AMENDMENT NO. 3.

RESOLVED BY THE SENATE, THE ASSEMBLY CONCURRING, That the Legislature of the State of California, at its regular session, commencing on the seventh day of January, nineteen hundred and one, two-thirds of all members elected to each house concurring, hereby proposes that article thirteen of the Constitution of said State be amended by adding thereto a new section, to be known as section number one and three-quarters, which shall read as follows, to-wit:

Section 1¾. All bonds hereafter issued by the State of California, or by any county, city and county, municipal corporation, or district (including school, reclamation and irrigation districts) within said State, shall be free and exempt from taxation.

### WHY INTEREST IS TAKEN IN THIS AMENDMENT.

The League of California Municipalities is an organization having a membership of seventy-five of the incorporated cities and towns of the State, and the officials of these cities are the individuals who give the organization its effectiveness. It is this League that stands responsible for the passage of the above amendment by the Legislature, and proposes to carry on an educational campaign in favor of its ratification by the people.

The Public Officials of the State (municipal and county officers) are brought face to face with the questions affecting the public welfare, and especially are they forced to consider matters of tax-

tion and public improvements.

As the greater amount of public improvements secured must be, under our present fiscal policy, the result of bond issues, and as the bonds issued must be paid by taxation, it must be admitted that the experiences of public officials in the matters above stated are worthy of serious consideration.

The League of California Municipalities, at its last two annual conventions, emphatically endorsed the proposition of exempting public bonds from taxation and instructed its Executive Committee to carry on an Educational Campaign in favor thereof.

### THE RESULT OF TAXING PUBLIC BONDS.

At the present time public bonds are subject to taxation in this State. In other States such bonds are either exempt from taxation or their assessment made easy to evade. The consequence is that the bulk of the public bonds in this State are held by Eastern investors.

The estimated total amount of public bonds outstanding is in round numbers \$16,000,000, one-half of this amount being the bonds of municipalities, the remainder being the bonds of the State, counties and school districts.

Of this amount less than \$1,000,000 is listed for taxation purposes; that is to say, private investors, residents of this State, probably hold less than one-sixteenth of our public bonds.

The annual interest charge on these bonds is approximately \$750,000. This charge has to be met by taxation, and our taxpayers are contributing the much larger portion of this sum to the enrichment of eastern investors.

By imposing taxation upon our own evidences of indebtedness we prevent our own citizens from becoming our creditors, while taxing them to provide incomes for citizens of other States.

*This is certainly unfair.*

By subjecting our bonds to taxation, we prevent to a great extent our own citizens from purchasing them, thus narrowing the limits of competition in this respect; hence at public bond sales there are very few bidders, and the premiums offered are naturally smaller than would be if the number of purchasers were larger, which would be the case if our own citizens could become investors.

#### WHAT WE WOULD GAIN.

By limiting the number of investors to a few Eastern Bond Buying Concerns, not only are premiums offered smaller, but the rate of interest naturally must be larger than need be in order to attract them to become purchasers.

It is a safe assertion to make, that if our bonds were not subject to taxation, the rate of interest need not be over four per cent. in any case, and in case of large issues, even less than this rate.

This would result in a saving of nearly one per cent. in the rate of interest and taxpayers would be benefitted to this extent. Public improvements would also be stimulated.

During the past year municipal bonds alone were issued and sold to the amount of over \$3,000,000. Less than one fifth of this amount was sold in this State, so that we lost more in increased interest than we can possibly gain by taxing the small amount remaining at home.

Moreover, it is a rare exception to find bonds issued by a county or municipality, taxed by the county or municipality issuing them. The small amount assessed is largely in San Francisco. The country communities issuing bonds therefore tax themselves to pay the interest to the holders of the bonds in the large financial centers and thereby stimulate the flow of wealth from country to city. By removing the tax on bonds there is every reason to expect that a large percentage of bonds will be held in the communities issuing them.

There are always many citizens ready to invest in public securities of their home locality. Why should we borrow money from outsiders when our citizens have it to loan?

Under the present policy we gain practically nothing by taxing public bonds, so few there are that are assessed.

We loose by higher interest charges which increases taxation.

We prevent competition in bidding for bonds.

We deny our own citizens the privilege of making investments.

*Why should we continue the present injurious policy. We therefore urge the adoption of Senate Constitutional Amendment No. 3.*



#### The Town's Opportunity.

[CHARLES MULFORD ROBINSON IN HOME  
AND FLOWERS.]

It is the town's turn. The great waves of emigration are not guided by chance, nor is the flux and reflux of population influenced by a sense of justice. To say, then, that it is the town's turn is not to say, however true, that because, in the past, country and city have been the attractive magnets of population, the town should now be the magnet. The assertion is based on no such poetic justice, but recognizes in many occurrences the sign posts of a new way, of a highway, that leads out of the city and into the town, and sees sure indications that the people are turning back, are looking wistfully along this way to learn what the town can offer.

Are the streets in the town, they ask, bordered with lawns flower strewn? Are there trees and singing birds? Is the community in touch with the world? Can it offer intellectual stimulous and esthetic enjoyment as well as grateful repose? Have the children good schools to supplement ample playgrounds? Are there the conveniences that city life has transferred from the list of humanity's luxuries to that of its



necessities? The town, to profit by its opportunity, must be not only as good as the city, but a little better. It must have the city's most essential attractions, and must add to these something of its own.

Youth, Age, Poverty and Prosperity stand on the hill-top, hesitating. Below them on one side gleam the myriad lights of a city. The broad, paved way that leads to it is choked with traffic. Upon it are the riches of the earth; borne on its tide are the tears of the world, the laughter of the world, great sins and great virtues. Vast success and hopeless failure touch elbows in the press. Far away the road is lost; but towers, domes and spires, high above the toilers, picture aspirations, noble impulse, high endeavor—still bearing witness to the opportunities that await the city dweller, while the smoke from a thousand chimneys tells of industry and wealth, though it shut out the sky's deep blue. On the hill's other side stretches away another road. Thick with dust, the sunshine beats mockingly upon it; the fields and rocks shriek patent medicines alike to weary, poetic or ambitious brains; and the road ends in a cluster of dilapidated houses standing in neglected gardens. Here weeds grow by the wayside and the life is purposeless and slow. The dust in the road is undisturbed, for the town sleeps dreamless in utter isolation.

The watchers on the hill turn shudderingly away. "Great is the lottery," they say, "in choosing the city. There may be success or there may be failure; but at least the chance of life, of wealth, of glory is there, and that is preferable to the death of the town."

A third road meet their eyes. It is well built, smooth and hard. A row of trees on either side catches the sunshine, which, sifted by the leaves, falls shorn of its burning heat. A trolley hums merrily at the side, affording intercourse with the city. The town, at the road's other end, is a cluster of pretty, tasteful houses, with smooth

lawns about them, and flowers and hedges. The streets are shaded, the sidewalks are in repair, the common is like a garden. The school and public library are as good as anything of their size in the city. The heart-beats of the world click on the telegraph wire, the voice of the world on the long-distance telephones.

With the telegraph and telephone, the bicycle and trolley, the rural free delivery and the good roads. Fortune has suddenly turned about and given the town an opportunity. Will it be wise enough and daring enough to grasp this opportunity?

There is need here of serious self-questioning. The town must ask itself in all earnestness what it can do to offset the glare of the city, what it can offer to balance the urban attractions. Convenience and speed of transportation, readiness of intercourse by mail and wire; these are essentials of business without which the town has little chance. But they are not enough to win men from the city. In whatever degree the town possesses the city possesses them quite as well. Scarcely less as necessities are the intellectual opportunities and incentives. The utmost the town can do is not to fall behind in these, private wealth and public spirit helping it.

The town's real chance to outdo the city lies in the realm of esthetics. Here is its opportunity. Through natural advantages it can make itself so much more beautiful than the city, can make life so fair within itself, that the choice will be sure and swift, and the day of the town—suburb or interurban—will dawn. This were so blessed a sociological movement, one of so much promise to the growing congestion of the cities themselves, that efforts for "A More Beautiful America" can be said to have before them no higher call than this—the call of the town's opportunity.

The town's opportunity in a series of happy extraneous conditions is supplemented by developments within the

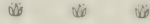
town which vastly heighten the advantage. Viewed from without, not only does it seem that the town's turn has come, if it be wise enough to grasp the chance; but within the town there are conditions that make appreciation of the opportunity, and action in accordance with this appreciation, extremely probable.

For observe: Ease of outside communication and facility of travel have broadened views. The old self-satisfaction born of ignorance need no longer be combatted. Progressiveness is in the air, and the town's improvement, in one respect or another, is discussed openly, fearlessly, even eagerly. Nor is the discussion merely academic. The increasing number of wealthy summer residents which nearly every town can boast, and the loyalty of sons and daughters who, though now living in other places, have love enough for the old home to open purses in its behalf, put into the town's hands ampler means than it could otherwise have had to carry out generous improvements.

With these fortunate advantages there comes another that is of scarcely less importance. It is the appreciation by the townsmen that beauty pays. The hotel proprietors, the store keepers, the liverymen, the physicians, even the town's officials, realize that a common regard for the amenities of life—the protection of fine vistas from spoliation, the cherishing of natural advantages, and a fair provision for the comforts and conveniences that mark an up-to-date community—all tend at once to make life pleasanter in the town, and to bring into it a class of visitors and residents who spend money freely, and who in some cases distribute largess in public gifts. It becomes easy, therefore, to form an improvement society; the society's political way is made smooth, and the "sinews of war" the money necessary, lies almost awaiting its formation.

Almost without knowledge, how it was accomplished, save in the conscious

glow of a new and thrilling civic pride, the town will be made over. And once made over, good fortune will smile upon it, they who are watching on the hilltop choosing wisely.



### Burnt Mud for Highways.

[REVIEW OF REVIEWS.]

Of late years burnt mud, or burnt gumbo, as it is more widely called, has been extensively used in the central West for railroad ballast. In Illinois, Missouri, Iowa and the neighboring states the trunk lines of railroad are largely ballasted with burnt gumbo. Its use is, therefore, beyond the experimental stage.

While at first it was intended that the burnt gumbo should take the place of natural rock ballast in those localities where the latter could not be readily and cheaply obtained, its superiority over stone was soon proven to be so great that it is now widely used, even where there are good rock ledges.

The railroads handle the clay and carry on all operations connected with its burning by machinery. The burnt gumbo, ready for use, can be delivered on board the cars at a cost of 25 to 35 cents a cubic yard. When burned by hand, as would usually have to be done in highway improvement, the cost would be, perhaps, 10 to 15 cents more. The railroad gumbo pits are often a mile or two long and hundreds of feet wide. In the case of the highways, the mud would merely have to be shoveled out of the roadway, burned and shoveled back.

While for macadamizing purposes on country roads burnt gumbo is not quite so durable as some of the best grades of rock, it has many advantages to offset this one shortcoming, slight as it is. The process of producing burnt gumbo requires practically no capital or great skill to carry on. The most ordinary labor and a little common sense on the part of one person, as overseer, can produce the best of results. Of course, the



road should be properly graded and crowned before putting on the gumbo road-metal. A surface of burnt clay, six to eight inches in thickness, is commonly sufficient for good results; or ten inches in particular places, where unusual conditions exist or traffic is especially heavy.

By selecting for improvements the heaviest parts of the road first, since the worst stretches are often caused by the very material that makes the best grade of road metal, and systematically working under intelligent guidance, five years would find every principal highway in a county as passable the year around as a paved city street, and at very little more cost than is now usually squandered on "working the roads." The county surveyor could easily superintend the whole work for this district; and, with local overseers as head burners, he could soon produce as good a system of highways as any one could wish for. Once properly prepared, two men could easily keep the roads of the whole county always in good repair.

With no more expenditure of money and effort than is now put on the country roads, ballasting with burnt clay would produce in a dozen years a system of highways equal to any of those for which France has so long been famous.

A burnt gumbo road is never muddy, for that property is lost in the burning. The surface of the road is hard and smooth. As a speedway for bicycles and automobiles it is ideal. For carriages and heavy wagons it has no superior. No vegetation can grow on it. It is practically free from dust, after the highway system has been well developed, so that mud is not brought in from the tributary roads. Moreover, the warm, red highways contrast pleasantly against the green landscape at those seasons of the year when country drives are most enjoyable.

The process of burning clay is quite simple. Along the roadside, cord wood is piled ten feet wide. On this is thrown

three or four inches of coal slack, and twelve to twenty inches of gumbo mud, which is cut from the roadway, or a pit, as the case may be. On firing the wood, enough air enters the pile to enable slow combustion to be carried on without the generation of too much heat, which would vitrify the city.

When a "pit" is made, as often is necessary when burnt gumbo has to be hauled some distance, or, as is the usual way with the railroads, new additions, of slack and mud are added each day on one side of the pyramid, while on the other side the burnt gumbo is allowed to cool and is then carried away. In this way the pit advances sideways a few feet a day until it has become several hundreds of yards across.

The gumbo clays have many notable qualities, besides being excessively sticky in wet weather, enabling them to be readily distinguished. They usually form what the farmer calls cold, sour soils. These soils cannot be tilled to advantage. The land occupied by them is almost worthless, except, perhaps, for scant pasturage at certain seasons of the year. The clays absorb and are capable of retaining an immense amount of water, often so much as twenty-five gallons to a cubic yard.

Permission to locate a railroad ballast pit on some farmer's gumbo land is usually readily obtained. He not only gives his consent and the use of the land free, but he is secretly delighted at the idea of having the railroad excavate without cost to him a big pond for his stock.

The best clays for making burnt ballast are distinguished by certain physical properties. They are very plastic, quite impure, very fine-grained and tenacious. Their strength is enormous, often as high as 400 pounds to the square inch. The shrinkage is very great—10 to 12 per cent. in the drying and burning process. These are the technical tests for recognizing these clays. A ready practical test is to find the very worst stretch of a muddy country highway.

### Uniform Accounting in Iowa.

A committee appointed by the League of Iowa Municipalities has been investigating the matter of establishing a system of accounting and publicity for its municipalities. The following is the report of the committee:

It is the opinion of the committee that a law should be enacted providing for a uniform system of accounting for receipts and expenditures of cities, and the dissemination of official, authentic and intelligible information in reference thereto among the people. Private business is usually managed more carefully and economically than public affairs, because of the application thereto of better business methods. In many of the cities and towns in the state there is no practical way in which the voter can obtain information in regard to its fiscal affairs. The burden of municipal taxes is heavy. The people furnish the money and should be provided means of knowing what becomes of it.

The American people seldom err in determining public questions when they possess accurate information on which to base their judgment. A thorough system of public accounting will insure a more economical administration of municipal affairs and prevent the misappropriation of funds.

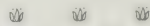
Under the present want of system the council, almost without exception, leaves its successor a legacy of increased indebtedness and confusion. A careful system of accounting is of the greatest importance to cities operating public utilities. Recently the city of Philadelphia, after fifty years of municipal management turned over its gas works to a private company, largely of the failure of the published accounts to give a correct statement of the financial condition of the enterprise. It is said by Mr. L. S. Rowe, in writing on this: "Each year the published reports showed a large surplus which stifled the criticism to which the management would otherwise have been subjected.

In fact the deterioration in the quality of the gas was largely due to the brilliant financial reports. When the attack upon the city's works was opened by the companies desiring to obtain the franchise it was found that instead of the gross profit having been applied to the repair and improvement of the works, no account had been taken of depreciation and deterioration."

As the best remedy for the trust evil is believed to be publicly, so also is publicity the best remedy for the overtaxation evil in cities and towns.

The cities of Iowa are still comparatively young and this is the time to lay the foundation for the best government in the future. If the people are furnished the means of information in reference to the conduct of their affairs, they then have only themselves to blame for extravagance and mismanagement. As was recently said by Professor C. W. Haskins, of the New York university, "City finance as a topic is too often reserved for campaign talk; the harangue itself is hardly more than a string of personalities; figures are impudently juggled; reform in the red ray of a sham fight; and as soon as the show is over, the lights are put out and the people are as much in the dark as ever."

The committee therefore recommends the enactment of the bill presented herewith, entitled: "A bill for an act requiring the keeping of accounts of cities, and requiring that publicity be given thereto."



### Cost of Traction.

An Indiana engineer recently estimated that the cost to move one ton per mile by horse power over a dry, sandy road was 64 cents; over wet sand, 32 cents; over ruts and mud, 39 cents; over broken stone and ruts, 26 cents; over an earth road that is dry and hard, 18 cents; over a broken stone road in good condition, 8 cents; over a compact gravel road, 8.8 cents; over stone paving, 5.33 cents; over asphalt, 2.7 cents. If



wagon transportation could be carried on at a cost of 5 cents per mile per ton the result would be a saving of many millions of dollars, and would put in motion many millions of tons of merchandise that cannot now be handled with profit.—Midland Municipalities.



### Oil Macadam Specifications.

The Town of Emeryville, is the first municipality in the State to adopt specifications for macadam streets which require the use of crude oil in the construction. Town Engineer, Thos. N. Badger, who prepared the specifications, reports that preliminary proceedings involving the improvement of about two miles of streets with oil-macadam have been taken by the Town Trustees. The work will be done under the so-called "Vrooman Act."

The writer has been of the opinion for some time that the most satisfactory results following the application of crude oil to macadamized streets would be seen by its use at the time the street was first constructed. It is their pleasure to note that Mr. Badger has the progressive instinct sufficiently developed to apply the oil test to a street at the right time.

The following are the specifications:

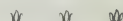
All macadamizing shall be done only with hard rock, of igneous character, known as hard blue trap rock, or hard gray trap rock, which shall lose by abrasion and fracture not more than twenty per cent of its original weight when subjected to the rattler test, which test shall consist in placing one hundred and twenty-five (125) pounds of the macadamizing rock crushed to pass through a two and-a-half ( $2\frac{1}{2}$ ) inch circular ring, in the machine known as the rattler, belonging to the State University or some similar machine, and revolved at the rate of twenty-eight (28) revolutions per minute, as nearly as practicable for 5,000 revolutions.

After the grading and rolling of the street to the proper subgrade, as pre-

scribed heretofore, a layer of rock eight inches in thickness, crushed to pass through a two-and-a-half ring, shall be spread evenly over the street, which shall then be rolled with a light roller and made to conform to the section hereto attached and made a part hereof, after which a layer of one inch of screenings shall be applied to the entire street surface. The whole then to be well watered and thoroughly rolled with a roller of not less than ten tons in weight.

After such watering and rolling, it shall be allowed to stand undisturbed for a period of twenty-four hours, when it shall be coated with crude mineral oil of twelve to fourteen gravity (Beaume), containing not more than two per cent. of water. The oil shall be applied at a temperature of 200 degrees Fahrenheit; the roadway shall be dry and the sun shining at the time of its application, and the ratio of application shall be one gallon of oil to one square yard of street surface.

The application of oil shall be immediately followed by a layer of sand half an inch in thickness, to be evenly spread over the entire oiled surface. Great care shall be exercised to prevent the application of oil to the crosswalks, and one side of the street shall be completed before commencing work on the other side.



### Practical Men vs. Dreamers.

It is extremely difficult for a practical man—this term is used as a synonym for "money-maker"—to form any just estimate of the mission, work and compensation of one who works for the general welfare without a personal money making objective point. To advocate a scheme whereby one, or at best a few, can make millions, is practical business of a high order. To devote one's abilities to secure the adoption of a public policy whereby the people as a whole can make millions, but no person, or coterie can make more than his

individual share of the millions is visionary. These are the estimates "of the street." In history it is different. There money-makers enrich the soil, nothing more. This is all history can say for them, because it is all there is to be said. There is nothing in this capable of perpetuating individuality. But when history becomes a record of dreams that have come true, the individual dreamer is immortalized for having been greater than other men of his day.—Public Policy.



### Speed Regulations for Automobiles.

S. M. BUTLER, IN MUNICIPAL JOURNAL  
AND ENGINEER.

The numerous and radically different state laws and city and town ordinances regulating the speed of automobiles which now exist in this country present a striking picture of the widely divergent opinions upon the subject. Some of these laws indicate on the part of the framers a lack of knowledge of this new method of locomotion, which must of necessity be regulated and dealt with along twentieth century lines.

The State of New York has a general law restricting the speed of motor vehicles, whatever their source of motive power, to eight miles per hour within cities and incorporated villages and twenty miles per hour outside of cities and villages, but allows such cities and villages to grant, by ordinance, a speed in excess of eight miles per hour within their limits, if they so wish.

The State of Connecticut by a general law allows a speed of twelve miles per hour within cities and fifteen miles per hour outside of cities, but prohibits any city, town or borough from passing any general ordinances restricting the speed of motor vehicles on the highways. It provides, however, that any city, town or borough may, upon any special occasion or, whenever in its judgment it may be deemed advisable, grant permits to run motor vehicles at

any rate of speed, under proper safeguards, during a specified time and upon specified portions of the highways within such municipality. The framers of this law were the first in this country to recognize and appreciate the great influence of road contests in the development and perfecting of the automobile. Other states and municipalities would do well to follow this example.

The State of New Jersey has no general law restricting speed, but the Board of Freeholders of the several counties may adopt such ordinances as they deem reasonable.

The State of Massachusetts, like New Jersey, has no general law regulating speed, but permits cities and towns to adopt regulations prohibiting the driving of automobiles at a rate of speed deemed inconsistent with public safety or convenience.

The State of Rhode Island has now pending before its legislature a bill modeled on the same lines as the Connecticut law, and embodying the provision of allowing cities and towns to grant special permits for speed trials on the highways.

Various other cities throughout the United States, in states where no general law has been enacted, have adopted ordinances restricting speed to six and eight miles an hour in the compact or built up parts of cities, and twelve to fifteen miles in the outlying sections. While some are more liberal than others in their provisions, there is perhaps no single ordinance that combines what may be considered an altogether reasonable regulation.

It is safe to assume that a fair and just regulation will not be framed until the superior control of the motor vehicle in stopping and starting and its perfect dirigibility, as compared with the horsedrawn vehicle, is fully recognized and well established in the minds of our law makers. It is this very point of control on which is based the claim that the motor vehicle should be entitled



to run at greater speed on the highways than the horse-drawn vehicle. It should be remembered that by means of foot and hand brake it is possible to bring a motor vehicle to a full stop when running at a speed of fifteen miles an hour, in one and a fifth times its own length, and when running at a speed of from eighteen to twenty miles per hour in two and three-fourths times its own length. Results of most exhaustive brake contests show that motor cars can, on an average, be stopped when traveling at twenty miles per hour in less distance than the ordinary horse-drawn vehicle could be stopped when traveling ten miles per hour. It is a natural sequence that a law or ordinance regulating the use of automobiles on the highways will not be enacted in any community until the motor vehicle has found its way into such community in sufficient numbers to call for municipal regulation. This being the case, its officials whose duty it is to frame such ordinances would acquaint themselves with the workings of the automobile, taken in connection with a review of what other communities have done in this direction, it would go far toward enabling them to formulate a reasonable and just ordinance. This can, in most cases, be quickly and satisfactorily accomplished through the local automobile clubs which are springing up in all the large cities of the United States, whose chief function should be to impart to their local legislators a full knowledge of the vehicle for which they seek greater privileges on the highways.

Perhaps the nearest to an ideal regulation would be a limit of twelve miles an hour in the built up portions of cities and twenty miles an hour in the unbuilt up portions, with the privilege to run beyond these speeds between cities and villages, safeguarding such privilege by an enforcement of the common law provision covering the general use of the highway—that no vehicle shall be driven at a greater

speed than is reasonable and proper having regard to the traffic and use of the highways, or so as to endanger the life or limb of any person. These conditions are most nearly approached in France, where a speed of eight miles an hour is allowed in the compact part of cities and twenty miles an hour in the outlying portions, while still greater speeds are permissible on the open highway between cities and village predicated upon proper regard being given to such traffic as may be met with thereon. It is no doubt due to this liberality as to speed, encouraging the use and contest of motors on the highway, that the automobile in France has been brought to the high degree of perfection which it now enjoys. It is conversely true that the development of the automobile in Great Britain has been greatly retarded by restrictive laws in reference to its use on the highways, the limit of speed to-day in England and Ireland being twelve miles per hour, and in Scotland ten miles.

A further point which could well be considered by those who frame our law is the education of the horse. The passage of a regulation which is liberal in its provisions and which encourages the use of the automobile in the city streets and on the country highway in the greatest numbers, will better and more quickly accomplish this education than any other method. With the education of the horse the one great objection to speed on the highways—the frightening of those animals which are unused to the sight of a mechanically propelled vehicle—falls to the ground and accidents therefrom become a thing of the past.

With the coming of motor vehicles in greater numbers in every section of the country as a result of the encouragement to be found in liberal regulation for its use, collaterally will come the building of improved highways on which to run them, and improved highways mean a cheapening of transport

tion to the framer and increased commercial, educational and social advantages to every member of a community. This one feature alone is a potent argument in favor of the passage of laws which will vigorously encourage the adoption of this the coming method of transportation in every department of commercial and social endeavor.

As we are, perhaps, the most progressive of the nations of the world, it is to be hoped that we will not hinder and encumber the rapid introduction of this new locomotion by unreasonable and restrictive laws, denying it the free use of the highways for its development to the highest possible state of perfection, but keep step with the march of progress of the twentieth century by enacting reasonable and liberal regulation.



### Closing Up.

[FRESNO REPUBLICAN.]

There are signs that the era of "wide open" towns in California is rapidly closing. The change in Fresno within the past few years, and particularly within the past few months, is seen and approved of all men. Even Bakersfield shows symptoms of an awakening conscience, and the strongest boast it makes of its recent street fair is that, by much strenuous effort, it was kept decent. In San Francisco, there is an incipient crusade against open gambling, and the Chronicle calls the board of supervisors to task for not passing a stringent ordinance, on the model of those of Eastern cities, directed against gambling as such. Everywhere there is a growing realization that open gambling, public prostitution, and omnipresent saloons, are not a credit to a city nor anything but a drag to its prosperity.

Southern California found out two decades ago that "wide open" conditions do not pay, and this is a reason, among

others, why Southern California has grown more rapidly than the rest of the state. People who come to seek homes in California do so because California is a more desirable place to live in than any Eastern state. Nature has made it so, and nothing but man can prevent it being so. But a city run on the "wide open" plan is not a good place in which to found a home, no matter what its climate or industrial resources. Particularly, it is not an attractive place to which to invite residents of the stricter communities of the East. Good schools and good churches recommend a town, too many saloons arouse suspicion and open gambling and other public vices provoke positive condemnation. This has always been the truth, and the last of California cities are gradually perceiving this truth through the receding mists of the old hallucination.—Fresno Republican.



### Washington the Beautiful.

The Park Commission that has been planning the improvements in Washington, D. C., has about completed its plans and recently held an exhibit to show what had been done. Clay models, maps, diagrams, photographs, etc., constituted the exhibit, showing the main features of the proposed improvements. Among the many alterations Potomac Park and other parks in and about the city will be completed, the Mall will be extended and beautified, there will be a driveway from the Capitol to the river opposite Arlington, the entire length of both the north and south driveways being set aside for government and municipal buildings and all the buildings between the Mall and Pennsylvania avenue are to be removed and the railroad tracks crossing the Mall will be removed. The plans of the commission are merely the enlarged plans of Washington and L'Enfant, who founded the city.



### Newly Elected Officials.

**BENECIA**—Trustees, W. L. Crooks, O. Trautz; Clerk, J. H. Banfield; Treasurer, — Glendon; Marshal, W. J. Harnett.

**ANTIOCH**—R. Harkinson; Dr. J. W. DeWitt, J. P. Abbott; Clerk, R. Wall; Treasurer, G. Meyer; Marshal, O. E. Vogel.

**WATSONVILLE**—Trustees, E. A. Hall; W. A. Trafton; Clerk, S. W. Coffman; Treasurer, W. B. Cooper; Marshal, Howard V. Trafton.

**WILLOWS**— — Rainville, — Tremblay; Clerk, G. Johnson; Treasurer, C. Wickes; Marshal, T. Kinkaid.

**RED BLUFF**—Trustees, H. P. Stice, F. A. Weast, J. Landis; Clerk, F. W. Decker; Treasurer, W. B. Cahoon; Marshal, T. R. Ward.

**AUBURN**—Trustees, W. A. Freeman, J. W. Morgan, F. W. Wildman; Clerk, J. H. Lindsey; Treasurer, A. L. Smith; Marshal, A. S. Waldo.

**LINCOLN**—Trustees, L. D. Adams, A. J. Gladding; Clerk, A. B. Fitzpatrick; Treasurer, Chas. E. Beerman; Marshal, S. C. Lasswell.

**SONOMA**—Geo. Breitenbach, Julius E. Poppe, A. Pinelli; Clerk, J. B. Small; Treasurer, M. Muldry; Marshal, W. T. Albertson.

**CLOVERDALE**—Trustees, Carl Haehl, M. Austin, Charles McPherson; Clerk, Thomas B. Wilson; Treasurer, W. T. Brush; Marshal, F. P. Connor.

**HEALDSBURG**—Trustees, T. S. Merchant, William Rowland; Clerk, C. H. Pond; Treasurer, E. S. Rowland; Treasurer, J. C. Ingalls.

**REDWOOD CITY**—Trustees, H. Mouro, Wm. Havey, Chase Littlejohn; Clerk, D. R. Stafford; Treasurer, Frank Towne; Marshal, John Christ.

**RIVERSIDE**—Trustees, J. W. Chase, Oscar Ford, J. T. Lawler; Clerk, C. R. Stibbens; Treasurer, J. C. Stibbens; Marshal, F. P. Wilson.

**ST. HELENA**—Trustees, W. A. McKinder, E. G. Schuneman, A. Schweinitzer; Clerk, Otto Behrens; Treasurer,

W. A. Elgin; Marshal, J. G. Johnson.

**CALISTOGA**—Trustees, C. W. Armstrong, Newton Connor; Clerk, Rev. J. C. Colyar, Treasurer, C. M. Hoover; Marshal, David Rose.

**MARTINEZ**—Trustees, A. B. McKinzie, T. A. McMahon; Clerk, M. H. Hurley; Treasurer, W. J. Douglas; Marshal, C. B. Woolbert.

**RIO VISTA**—Trustees, Otto Wilson, E. M. Chase, Louis Miller; Clerk, F. J. Kalber; Treasurer, L. P. Larsen; Marshal, H. Boock.

**MERCED**—Trustees, A. F. Pedreira, L. Henderson, L. J. C. Wegner; Clerk, C. B. Harrel; Treasurer, C. E. Kocher; Marshal, R. A. Meehan.

**CORONA**—Trustees, P. A. Bennett, A. Compton, G. F. Dean, C. W. Main; Treasurer, M. Teprening; Marshal, O. A. Arborn.

**BOULDER CREEK**—Trustees, W. H. Dool, I. T. Bloom, J. H. Fuller, S. Hubbs, O. McAbee; Clerk, D. R. Trout; Treasurer, J. H. Almstead; Marshal, — Seidler.

**REDONDO**—Trustees, L. J. Woolley, W. J. Hess, M. V. Fisher; Clerk, S. D. Barkles; Treasurer, George Gate; Marshal, E. P. Maxey.

**YREKA**—Trustees, A. E. Iunker, L. E. Guilbert, William Ruwe, J. E. Turner; Clerk, U. F. Brown; Treasurer, Maurice Renner; Marshal, A. L. Carrack.

**SANTA PAULA**—Trustees, John Irwin, L. A. Hardison, J. H. Sloan, C. H. Fernald, F. C. Foster; Clerk, F. E. Elwell; Treasurer, J. R. Haugh; Marshal, A. J. Baker.

**REDDING**—Ab Merrill, W. C. Powell, Ferdinand Hurst, A. I. Ashcraft; Clerk, W. G. Dozier; Treasurer, R. G. Dunn; Marshal, — Poole.

**LEMORE**—Trustees, R. A. Moore, C. H. Bailey, M. Howells, R. E. Foley, Frank Blakeley; Clerk, W. F. Holser; Treasurer, G. Merz; Marshal, B. C. Weir.

**WILLITS**—Clerk, C. J. Mast; Treasurer, C. A. Irvine; Marshal, T. B. Johnson.

EMERYVILLE—Trustees, W. H. Christie, Wm. Fieldwick, J. T. Doyle ; Clerk, John C. Coburn ; Treasurer, C. G. Mayborn ; Marshal, Morris H. Lane.

WAEATLAND—Trustees, A. H. Armstead, Geo. Dalbey, Sherman Harding ; Clerk, R. N. Murphy ; Treasurer, A. C. Stagner ; Marshal, W. F. Taggart.

DIXON—Trustees, John F. Cowden, J. D. Johnson, A. F. Shangraw ; Clerk, A. Manning ; Treasurer, Eugene Ferguson ; Marshal, Wm. C. Rhem.

MONROVIA—Trustees, J. H. Bartle, U. Zimmerman, W. A. Walker ; Clerk, Geo. O. Renner ; Treasurer, J. F. Banning ; Marshal, E. C. Willits.

COVINA—Trustees, E. G. Clapp, Thos. E. Finch, L. L. Ratekin, Jos. Moxley, C. W. Potter ; Clerk, Jas. R. Hodges ; Treasurer, F. M. Douglass ; Marshal, I. C. Fairly.

COLTON—Trustees, L. C. Newcombe, Wade Purdum, E. A. Pettijohn, E. D. Roberts ; Clerk, James Waters ; Treasurer, H. B. Smith ; Marshal, T. S. Adkins.

SOUTH PASADENA—Trustees, E. H. Lockwood, O. W. Orcutt, Walker Jones ; Clerk, Alexis Hinckley ; Treasurer, E. D. Hill ; Marshal, M. B. Reid.

WHITTIER—Trustees, A. C. Maple, Horace L. Baldwin ; Clerk, Walter E. Butler ; Treasurer, John H. Coverley ; Marshal, Fred M. Foster.

SUISUN—Trustees, W. H. Bryan, E. Luehning, Meyer Dinkelspiel, W. L. Griffiths ; Clerk, F. Wm. Gabriel ; Treasurer, J. Linahan ; Marshal, D. C. McDonald.

LAKEPORT—Trustees, N. O. Smith, Jos. Levy ; Clerk, H. V. Keeling ; Treasurer, Frank Howe ; Marshal, R. J. Hammack.

SAN JUAN—Trustees, Kemp, Moore, McKenzie ; Clerk, George Jean ; Treasurer, A. Trix, Jr. ; Marshal, F. L. Spitts.

MODESTO—Trustees, J. R. Broughton, J. M. Pike ; Clerk, W. A. Harter ; Treasurer, James Johnson ; Marshal, R. D. Young.

SELMA—Trustees, J. V. Leathers, H.

A. Hansen ; Clerk, J. L. Mitchell ; Treasurer, D. S. Snodgrass ; Marshal, J. L. Campbell.

LOS GATOS—Trustees, R. R. Bell, Capt. B. P. Shuler, Jas. H. Pearce ; Clerk, J. Frank Henderson ; Treasurer, F. Watkins ; Marshal, Elmer E. Springer.

SAN LEANDRO—Trustees, J. I. Barbeiro, S. V. DuBois, J. F. Hopper ; Clerk, L. J. Martin ; Treasurer, Jos. Herrscher ; Marshal, M. Geisenhofer.

HANFORD—Trustees, J. E. Viney, Harry Widmer, J. W. Rhoads ; Clerk, Jas. A. Hill ; Treasurer, Frank Hight ; Marshal, A. M. Frederick.

CORONADO—Trustees, Graham Babcock, George Holmes, Albert Matthews ; Clerk, W. F. Clark ; Marshal, J. L. Cameron.

NATIONAL CITY—Trustees, John Fleming, Frank Hall, Hermon Shall ; Clerk, George Grant ; Marshal, Wm. Eggleston.

ESCONDIDO—Trustees, Sig. Steiner, F. H. Chapin, R. C. Miller ; Clerk, S. L. Shotwell ; Marshal, B. Hinman.

OCEANSIDE—Trustees, O. W. Cranz, D. G. Harrington, W. S. Burnell ; Clerk, H. D. Brodie ; Treasurer, E. S. Payne ; Marshal, W. H. Trotter.

ANAHEIM—Trustees, Louis S. Fletcher, C. O. Rust, Wm. Berdrow ; Clerk, E. B. Merritt ; Treasurer, H. Cahen ; Marshal, M. F. Steadman.

KERN—C. V. Morrison, J. Q. Tolar, James Curran ; Clerk, A. J. Woody ; Treasurer, J. F. Dugan ; Marshal, H. Farris.

PALO ALTO—Trustees, Burke Corbet, D. A. Curry ; Clerk, H. W. Simkins ; Treasurer, G. R. Parkinson ; Marshal, H. A. Ramsay.

REDLANDS—C. L. Hayes, J. E. Ward, B. W. Cave, F. P. Meserve ; Clerk, L. W. Clark ; Treasurer, E. P. Morrison ; Marshal, J. E. Wallace.

ELSINOR—Edmund McCoy, C. S. Traphagen, James Balfour ; City Clerk, John E. Peck ; Treasurer, J. T. Kuhns ; Marshal, Charles P. Carter.

ORANGE—D. F. Royer, A. Meacham,



G. D. Toothaker, J. C. Williams; Clerk, D. R. Collins; Treasurer, W. H. Clayton; Marshal, W. T. Bush.

SANTA CRUZ—D. C. Clark, Mayor; F. R. Walti, H. Willey, F. K. Roberts, J. B. Maher; Clerk, J. L. Wright; Treasurer, F. W. Lucas.

LOMPOC—W. W. Broughton, I. N. Higbee, W. A. Saunders; Clerk, G. W. Meals; Treasurer, J. D. Black; Marshal, J. N. Saunders.

WINTERS—D. O. Judy, Alex Ritchie; Clerk, Maurice Nathan; Treasurer, W. H. Gregory; Marshal, W. P. Womack.

VACAVILLE—D. K. Corn, D. B. Derby, G. W. Crystal; Clerk, S. G. Creighton; Treasurer, Ed. Fisher; Marshal, A. Harmon.

SAN PEDRO—Trustees, Edward Mahar, James Weir, James T. Martin; Clerk, O. C. Abbott, Sr.; Treasurer, J. A. Weldt; Marshal, Bendix M. Baker.

MONTEREY—Trustees, R. F. Johnson, R. C. Sargent, Chas. G. White; Clerk, W. E. Parker; Treasurer, L. A. Schaufele; Marshal, Joseph A. Wolter.

PACIFIC GROVE—Trustees, E. C. Smith, J. H. Osborne; Clerk, E. B. Lewis; Treasurer, T. A. Work; Marshal, E. B. Rich.

CRESCENT CITY—Trustees, E. C. Berry, Sam Morris, John Murray; Clerk, J. M. Richter; Treasurer, Joseph P. Crawford; Marshal, F. B. Gay.

ONTARIO—Trustees, W. W. Smith, D. R. McGill; Clerk, Jacob Jesson; Treasurer, G. B. Harding; Marshal, A. N. Clark.

PLEASANTON—Trustees, Frank Lewis, Heinrich Reimers; Clerk, J. H. Neal; Treasurer, E. L. Benedict; Marshal, E. E. Head.

SANTA MONICA—Trustees, Wm. S. Vawter, J. C. Steele; Treasurer, E. W. Boehme; Clerk, J. C. Hemingway. Marshal, M. D. Barretto.

SAN MATEO—Trustees, M. J. Powers, J. P. Weller; Clerk, R. H. Jury; Treasurer, Henry W. Hagen; Marshal, James R. Wallace.

HAYWARDS—Trustees, A. L. Graham, A. S. Jones, P. Wilbert; Clerk, J. A.

Obermuller; Treasurer, E. B. Haas; Marshal, — Ramage.

SAUSALITO—Trustees, Jaques Thomas, E. H. Shoemaker; Clerk, F. D. Linsley; Treasurer, Joseph V. Silva; Marshal, John A. Hannon.

SAN LUIS OBISPO—Judson Rice, E. Fleugler, J. E. Van Schaick, J. Crocker; Clerk, George W. Robbins; Treasurer, J. E. Lewis; Marshal, W. G. Johnson.

PASO ROBLES—W. O. Dresser, A. Brendlin; Clerk, L. E. Williams; Treasurer, E. M. Bennett; Marshal, B. B. Pierce.

LIVERMORE—Trustees, Max Berlin, D. J. Murphy, T. E. Knox; Clerk, W. H. Wright; Treasurer, W. H. Taylor; Marshal, D. A. Smith.

MILL VALLEY—Trustees, F. Blair Turpin, Wm. Terry, John R. Wood, Alonzo Coffin, A. C. Hinz; Clerk, S. H. Roberts; Treasurer, A. L. House; Marshal, Melvin Staples.

UKIAH—Trustees, Thomas Charlton, Jas. E. Pemberton, O. E. Williams; Clerk, Jas. H. Carothers; Treasurer, D. M. Gibson; Marshal, W. De Merritt.

LONG BEACH—Trustees, W. L. Campbell, D. M. Cate, C. D. Hendrickson; Clerk, Will B. Julian; Treasurer, Chas. L. Heartwell; Marshal, Thos. W. Williams.

AZUSA—Trustees, R. M. Sippel, W. A. Sproul, G. J. Read; Clerk, W. O. Streshly; Treasurer, P. C. Daniels; Marshal, W. J. Remaley.

FERNDALE—Trustees, C. A. Doe, Geo. M. Brice, H. C. Blum, Adam Putnam; Clerk, W. H. Robarts; Treasurer, F. G. Williams; Marshal, J. B. Barnes.

FORT BRAG—Trustees, Frank Gandelin, H. Mulson, J. J. Morrow, J. A. White; Clerk, J. N. Morgan; Treasurer, G. A. Johnson; Marshal, Geo. Golden.

SUSANVILLE—Trustees, F. M. Ward, Jules Alexander, J. E. Pardee, H. W. Meylert, E. A. Martin; Clerk, W. S. Davis; Treasurer, J. B. Spaulding; Marshal, W. H. Edwards.

**HOLISTER**—Trustees, Hirman Pond, F. J. Bacon, E. E. Bolton, L. C. Hull, Len Hutz ; Clerk, J. H. Shaw ; Treasurer, C. H. Wagner ; Marshal, I. Archibald.

**POTTER VALLEY**—Trustees, K. C. Briggs, C. L. Hopkins ; Clerk, W. V. Kilboome ; Treasurer, E. E. Holbrook ; Marshal, E. M. Maze.

**SAN JACINTO**—Trustees, E. T. Tanner, O. W. Mellor, J. C. Peacher ; Clerk, J. Q. A. Hudson ; Treasurer, J. W. Ryan ; Marshal, C. A. Harper.

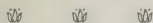
**PORTERVILLE**—Trustees, W. Mentz, J. N. Larson, Dr. O. C. Higgins, Fred Ackerman, A. A. Abbey ; Clerk, Fred Velie ; Treasurer, W. P. Putnam ; Marshal, John A. Howell.

**NEVADA CITY**—Trustees, Alex Gault, C. W. Chapman, Sidney Peard ; Clerk, Sidney Peard ; Treasurer, E. J. Morgan ; Marshal, Hi Shearer.

**GILROY**—Mayor, H. R. Chesbro ; Councilman, T. Hines, H. Mayock, Al Eustis, M. Rice, George Skillcorn, R. E. Woods ; Clerk, C. N. Hoover ; Marshal, J. McElroy ; Treasurer, Henry Hecker.

**ROCKLIN**—Trustees, J. F. Bowser, J. A. Marys, J. L. Whitney ; Clerk, J. H. Gregory ; Treasurer, I. Levison ; Marshal, I. F. Shannon.

**SAN JOSE**—Mayor, Geo. D. Worswick ; Councilmen, H. D. Mathews, P. Murray, A. L. Hubbard ; Clerk, J. A. Belloli ; Treasurer, T. J. McGoeghegan.



### **Campaign Against Billboards.**

[MUNICIPAL JOURNAL AND ENGINEER.]

The people of Portland, Oregon, are conducting a campaign against the unsightly billboards that disfigure all parts of the city. A measure has been introduced in the City Council for abating the nuisance. Members of art clubs and of the Improvement Society have taken up the question and are making strong arguments against the further continuance of this evil. Should the pending measure pass bicycle racks

will also have to go.



### **City Ownership of Telephones.**

[MUNICIPAL JOURNAL AND ENGINEER.]

It is reported that the city of Evansville, Ind., has voted to put in a telephone system to be run by the city. As the franchise of the present telephone company will expire this summer, four companies made application for the franchise. There was so much competition and trouble that the council decided to establish a system to be under municipal ownership. The experiment, if successful, will encourage many other cities who are in the control of telephone companies which have a monopoly of the business.



### **First Public Wash House in Pittsburgh.**

[MUNICIPAL JOURNAL AND ENGINEER.]

Pittsburg, Pa., is soon to have one of the first public wash houses in the United States. This will be for the benefit of poor women who make a living at washing. This idea is a common one in England, but is unique in the line of charitable work in America. Under this system women may take their washing and their children to the house where the attendants take charge of the latter while the women are at work. For a while a small fee will be charged for the use of the tubs, but it is calculated that the house will be self-supporting at the end of three years. The bath house will be thoroughly fitted out with all the modern conveniences and will afford the best sanitary conditions for work such as the women could not obtain in their crowded rooms. In connection with the laundry will be reading rooms and club rooms for the men.



## A California Library Commission.

[CONTRIBUTED.]

It is almost a truism to say that all important departments of human labor and activities require supervision. Without such overlooking success seldom comes. The more widely scattered are the interests concerned the greater the need. For instance, how can a railway run trains without a controlling head, a ship sail without a captain, a bank prosper without a president, or schools flourish without a superintendent?

More than ever before is this want recognized in the eventful days which usher in the twentieth century. Combinations controlling vast capital, the massing of those forces commonly called the hosts of labor, and, not least of all, great civic reforms demanding unselfish devotion to the public good; all these require leadership of the highest order.

We have but to glance around us to see that local government is largely carried on by a few individuals who are organized into boards which are sanctioned directly, or indirectly, by the state. We note that all the incidental affairs of every school district are managed by a school board of three members: those which belong to the educational policy of the districts are governed (except in the larger cities) by another board called the county board of education; while still another body termed the state board of education has general directive powers affecting the whole of California.

We have in our city governments the same familiarity with the board idea, as shown in city boards of education, police, fire and health; all holding office under city charters which derive their power through legislative sanction.

Then there is yet another example of the board idea in those bodies generally called commissions, whose members are appointed by the governor of the state to exercise various supervisory functions. Among these are the bank, in-

surance, building and loan association, highway, harbor, railway, and fish commissions, besides many others. Of course all these boards, or most of them, require supervision by men of experience who are paid generous salaries. Thus it will be seen that through these different boards, whether elective or appointive, the important business, sanitary and educational interests of the state are guarded and controlled.

This brings us to the consideration of the creation of another state board of an entirely different character from those now in existence. This is none other than a commission for the benefit of the free public libraries of the state.

It is perfectly clear to all who are interested in the welfare of these institutions that the state should no longer delay giving its powerful assistance in their establishment and development.

It must be borne in mind that, everywhere, the legal basis of free libraries is founded on the option of the community. If a city does not want a library (in California if more than 75 per cent of the legal voters are opposed) it can go with it till public sentiment changes. The state will not force people to read. It does require for its own safety that every child shall have the rudiments of an education. Beyond that, in library affairs nothing is done in our own state except to authorize a city to establish and maintain a library for the enlightenment of those who wish to use it.

This, however, is insufficient because the modern expansion of the library idea involves so much; because the wide-spread increase of public interest demands that current and prospective large expenditures shall be wisely administered. Surely when a generous stranger gives the public more than a million dollars within a few months, self-respect calls for the best possible investment of the money, and, what is vastly more important, suggestive assistance to the work carried on within the walls built by these gifts.

Fortunately for our purposes the appointment of a library commission is not an untried experiment. The State of Massachusetts created such a commission in 1890, and its work in these 12 years past has proved an unqualified success. The members are five in number; two women and three men, two of the latter being experienced librarians. They serve for terms of five years, receive no compensation, but are allowed \$500 per annum for incidental expenses of the board and clerical aid.

This law, which has been the model for similar legislation in many other states, provides that "The librarian or trustees of any free public library may ask the commission for advice in regard to the selection of books, the cataloging of books and any other matters pertaining to the maintenance or administration of the library; and the board shall give such advice in regard to said matters as it shall find practicable."

The results of the workings of this commission since its founding in 1890 are great gains in the establishment of new libraries, enlargement of existing ones, a very large number of donations (over two millions of dollars were given in one year by private donors for buildings and endowments) and enhanced interest in free library work throughout the country.

The very next year the State of New Hampshire enacted the same law and Vermont and Connecticut followed the good example soon after. Wisconsin, since 1895, has had a very active commission through whose efforts many libraries have been established and hundreds of traveling libraries kept in circulation. Ohio, Iowa, Minn., Ga., Wash. and others, a total of nearly 20 states have also established library commissions. No one has proved a failure while some of them have become of the highest value to this form of public education. Bills will be presented next winter for the establishment of commissions in Illinois and Missouri.

With this preliminary view of the

subject, let us now inquire how a library commission would benefit California. Obviously part of its work would be to stimulate the starting of libraries where none are in operation. Our common schools have the entire confidence of the people because they know that the welfare of the schools receives the untiring vigilance of the state. In like manner our free libraries will grow in public esteem when it is realized that the state is trying by the most widely approved methods to start and maintain new ones. Then again as matters now are, every new library starts under difficulties. In this year 1902 there is not a soul in all this great state to whom the founders of a library can look for expert advice, except to a busy librarian in an adjoining or, probably, a distant town. There are books and books of many kinds, good, bad, and indifferent. What are good (that is, suitable) for one locality are dull dry to another. To be helpful to any town, books must be carefully chosen with a realization of the town's special needs.

It should be noticed that neither in the selection of books, or in any other matter, are library commissions clothed with any authority of law. Their duties are purely advisory. The large libraries need no help; the small ones need a great deal of help of a suggestive nature,

So we may see that the preparation of lists of books recommended for purchase by small libraries is an important feature of a commission's work. It is also very desirable to inform the small libraries where and how to purchase to the best advantage.

Again, in starting a city library it should be assumed that it will have a steady growth. This means that the successive additions to its shelves should be carefully classified and properly catalogued. Judicious aid of this nature is of the highest value and a commission can always advise how it can be obtained.



A library commission can also be very serviceable to those cities which are to erect library buildings. Sound advice as to the planning of the interior is of utmost consequence, for a handsome exterior will never atone for ill arranged rooms and unsatisfactory accommodations for the library staff and those who throng its doors—the public.

Through the urgent efforts of the League of Municipalities a new general library law was passed at the last session of the legislature. The statute contains some special features which are of great value to the work of library extension; but to be most effective it is all-important that when our law makers next assemble that they should establish a LIBRARY COMMISSION.



### Direct Legislation.

[LOS ANGELES HERALD.]

There is apparent at the present time a strong tendency on the part of the people to take a more direct and a more responsible part in the making of the laws, particularly in the matter of municipal legislation. This tendency is confined to no particular party, although fairness compels the statement that the old parties have been slowest in considering the subject. On the other hand, it is largely a question outside of party lines.

Municipal legislation and municipal authority have been the most fruitful source of corruption in American government, and it is to this branch of politics that the people have been forced to give their most earnest attention. It has been apparent for a long time that greater and stronger restrictions must be had; that municipal officials must be made more directly and more immediately responsible to the people. Many plans have been tried, and more have been suggested; but at the present time direct legislation seems to offer the most practical remedy for the abuses that have crept into municip-

pal government, and it is safe to say that this system is sure to be practically tested on an extensive scale within the next few years. There has been, and is, considerable opposition to it, but this has arisen not so much from antagonism to the system itself as to apprehension regarding its results. Outside of this, it is opposed chiefly by those whom it would relieve of power. It is a sufficient answer to this class to say that those who would make good laws and enforce them would have nothing to fear from direct legislation.

The United States is not Switzerland, and it is wise not to attempt too much. One extreme is as bad as another. The people are bound in justice to themselves to give the proposed system a fair trial. If it should prove to be "a good thing" it will take care of itself, as the Australian ballot system has done.



### The Mattern Oil Patent.

The Judiciary Committee of the League of California Municipalities is investigating the subject of the Mattern patent for the use of oil in making good roads, and has received an extended brief in behalf of the legality of the patent from its owners. The question has presented itself to the committee whether or not oil has been used intelligently for the purpose of making roads prior to the granting of the patent, and any information on the subject of the use of oil prior to 1897 would be welcomed. Persons knowing anything on the subject are invited to address CALIFORNIA MUNICIPALITIES.



A decision of a Kentucky court holds a street railway company liable for a defect in a street caused by the projection of the rails, although originally properly laid, where the street pavement had fallen away from them.

### The Model Town at St. Louis.

Municipal improvement needs ideals. There must be something for the imagination to work with, or little is accomplished. This something need not be a set pattern for slavish imitation, but it must have some sort of form and shape in order to save the artistic impulse from its peculiar tendency to run riot. The movement for the betterment of urban life must have as little as possible of the vagueness of a dream, and as much as possible of the definiteness of a working plan.

Visitors to the Louisiana Purchase Exposition at St. Louis will see such an ideal embodied in the exhibit of the Model City, an account of which, by Charles Mulford Robinson, has been presented in the "Criterion." It is proposed to devote ten acres of ground to the construction of the exhibit, and to show people, by this method, what can be done to adorn, beautify and make comfortable the environment of that third of our population which now lives in cities.

"It is probable," says Mr. Robinson, "that no other idea presented to the directors of the Exposition has interested so many people." The plans have been carefully worked out by a young Philadelphia architect, Mr. Albert Kelsey, and it has been suggested that the exhibit be known as "Spotless Town."

The traveler will not enter Spotless Town by the back door. He will not be hauled over the dumps and dragged through a mile or two of noisome alley to be landed finally in such a choked and chaotic thoroughfare as Third street, San Francisco, under the impression that he has moved into a large, open-air Bedlam, planned and conducted by its least competent inmates.

There will be one depot, and it will open upon a broad and beautiful square, from the far corners of which will start the two halves of a circular boulevard.

Directly in front of him the traveler will see a parked avenue, beautiful with shrubbery, trees, and statues. It will

be shaded and cool and clean, and will invite him farther on into civilization. At the end of the avenue, through the trees, he will catch a glimpse of the city hall, which, as he approaches it, he will perceive to be flanked and almost surrounded by such public buildings as the schoolhouse, the hospital, and the structures for the fire and police departments.

All these buildings will be so designed that merely decorating and illuminating them will turn the plaza into a sumptuous court of honor for fetes and civic pageants.

Passing hence by a radiating avenue, our traveler will be able to visit the public recreation grounds, the educational exhibit, the plant for garbage disposal, and the displays of street lighting and similar appliances made by private manufacturers. And on part of the encircling boulevard he will find sections of streets as they actually exist in London, Paris, Turin, Vienna, Buda Pesth, Berlin and other modern cities, together with examples of the best methods of constructing subways and of carrying railways over or under public thoroughfares.

Nowhere will his senses be offended or his nerves racked by filth, needless noise, smoke-filled air or screaming double-decker advertising signs.

His life will not be endangered by overhead electric wires, his health will not be threatened by microbe colonies ploughed up by machine sweepers, his shins and his neck will not be imperiled by his having to climb over rickety sidewalks and jump hurdles of packing cases and skids.

The Model City will exist, partly, to show that these nuisances are not necessities of city life, and that people don't have to stand them if they don't wish to.

Our traveler will naturally inquire if this is not the fairyland of his childhood dreams. Having been informed that he is really awake, he will, being an intelligent traveler, ask the way to the nearest real estate man, with a view



to buying any odd corner lot there may be left and settling down with his family to spend his remaining days in the peace and comfort of so beautiful a place. When he learns that the directors won't let him, he will go sorrowfully away.

Yet he need not despair. Although in its completeness and symmetry the Model City may not be reproducible elsewhere, particularly in settled localities, it will be made up of features, which, separately, are among the most practical ideas in the world. In fact there will be few of them that do not already exist in Europe and in this country, and that cannot be readily duplicated in any American city that has risen above the unthrifty and primitive condition of a backwoods settlement.

And they will be the easier of duplication because our traveler will return to his home city filled with that discontent which is so properly called divine—for it elevates. The scrap heaps and dump piles, along the railway, that greet him on his homecoming, will not cheer his heart. They will have lost their power to charm. The music of a truck load of pig iron pounding over a cobblestone street will strangely make his head ache.

His thoughts will go back to the imposing railway square with its vista of green trees, and to the smooth, clean, quiet streets of Spotless Town; and when somebody proposes reproducing some of its features in his home city, he will not so apt to object to a little expense.



### Supervisors Resolutions.

The convention of Supervisors recently held at Redwood City adopted the following resolutions:

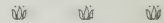
WHEREAS, There is a constitutional amendment to be submitted to the voters of the State at the next general election, known as Assembly constitutional amendment No. 28, which amendment will, if adopted, deprive the

Board of Supervisors of the State of the right to regulate the price of service to be rendered by all public service corporations; will take away the right of Boards of Supervisors to contract for or fix the price which the county will pay for water or other public service; denies to counties the right to acquire or operate water works or any other public utility; and in other respects is so pernicious that it is hereby

RESOLVED, By the Convention of County Supervisors, in convention assembled, that it is our deliberate judgment that the public good requires that said Assembly constitutional amendment No. 28 should be defeated, and to that end we urge that all voters vote against said amendment at the election in November next.

WHEREAS, The taxation of public bonds brings but little revenue to the public treasuries, but, on the other hand, results in a higher rate of interest chargeable upon such public debts, and consequential higher taxation, drives this class of securities outside of the State, depriving our citizens of the opportunity to invest their savings therein; therefore be it

RESOLVED, By the Convention of County Supervisors, that we favor the adoption by the people of Senate constitutional amendment No. 3, which exempts bonds hereafter issued from taxation, and we urge that the voters of the State vote in favor of said amendment at the election next November.



There have been municipal elections in over ninety towns in the State this spring and in only two were there nominations made by political parties. This is a good showing for non-partisanship in municipal affairs.

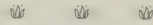
There promises to be a wonderful growth of the small towns between San Francisco and San Jose during the next few years. They will ultimately become suburban San Francisco. Rapid transit will do the work.

### Faults in Municipal Government.

Altogether there is a more hopeful tone about the observations made at the annual meeting of the National Municipal League than heretofore. The Hon. Clinton R. Woodruff, of Pennsylvania, in his review of the year's progress finds that the chief obstacle to civic reform is the stay-at-home voter. The Hon. Charles J. Bonaparte, of Maryland, doubts whether the proportion of down-right thieves among the people's servants is any larger than among the employes of private masters. Both of these remarks indicate a slightly better state of affairs. Heretofore it has been a conspicuous phenomenon of social science that there is less conscientious sense of responsibility toward an impersonal or corporate employer than toward a person, and least of all toward the public, as toward a sleepy, good-natured employer who is supposed to wake up only once or twice a year and who is even then so little more than half asleep as to be capable of entertaining only one question among half a dozen at issue.

The public was aroused, however, in several important communities last year and showed that it could make a change if it wanted to, and that here in New York it wanted to. It wanted personal registration in Pennsylvania and took it. To be sure, the beneficent results of the awakening are not as yet obvious in either New York or Philadelphia. The outlook would be more hopeful if they were. But we do not believe there will be any backward step after such hard-fought contests. There certainly will not be if Dr. Van Dyke's two categories of the dangerous vote—the men who vote without thinking and the men who think without voting—can be brought together not only on election day at the polls, but before election day in many conferences. This is why Mr. Woodruff so expressly welcomed the work of church societies and Y. M. C. A. branches. We do not believe in the

pulpit in politics. But the pew has neglected politics too long, and it is quite proper and necessary for the pulpit to make the pew think about its duties of every kind.—New York Press.



### A Park of a Government Reservation.

The Board of Trustees of Monterey have adopted the following resolution:

WHEREAS, The Military Reservation known as "The Old Fort Grounds," situated in this city, could, with but little expense, be converted into a most attractive and beautiful park, and,

WHEREAS, There seems no probability of the same being required in the near future by the United States Government for military purposes: Be it

RESOLVED, By the Board of Trustees of the City of Monterey that the President of the Board appoint a "park committee" to report at the next regular meeting as to the most advisable plans for obtaining from the War Department the requisite control of the premises together with an outline of necessary improvements and an estimate of the approximate expense thereof.



### Personal.

F. A. Leonard has been appointed city attorney of Redlands, vice T. R. Archer, resigned.

Frank Karr has been appointed city attorney of San Pedro.

E. C. Brown has been appointed city engineer and M. R. Jones city attorney of Martinez.

Gilmore Agnew has been appointed city attorney of Hollister.

A. Monteith has been appointed trustee of Paso Robles in place of T. Ladner, resigned.

Dr. A. J. Collar has been appointed trustee of Yreka in place of A. E. Junker, resigned.

H. V. Walsh has been appointed trustee of Winters in place of R. L. Day, resigned and F. M. Wyatt in place of H. Seaman, resigned.



Last month under the caption of "newly-elected officials," it was stated that F. B. Stanwood had been elected assessor of Marysville. This was a mistake; it should have been T. J. Williams.



### The Need of a Tree Warden.

We have always cordially endorsed such legislation as in a wise manner regulates the care and protection of public ornamental and shade trees, and we would wish that the necessity for such legislation had impressed its appropriateness upon all the States. Such laws have amply justified their enactment, and have done, moreover, valuable service in creating a better knowledge of trees and their economic uses in the community. The ruthless destruction of valuable trees in our country highways and villages, even at this late day, is appalling, and is evidently largely the result of ignorance, with all its lack of appreciation of either beauty or usefulness. In many rural districts throughout the country, the landscape is fairly denuded of tree life, simply because the abutting owners cannot realize that every good tree is worth the ground it occupies many times. Unfortunately the country school house does not yet ground its pupils in the primer of natural economics, so that the tree that draws its modicum of nourishment from the boundaries of the grain field or truck patch, even from the other side of the fence or hedge, is dubbed an enemy, to be destroyed at a convenient time. In the present condition of knowledge of the higher conditions of life, the tree is too often condemned as a nuisance, which on the contrary should attract the veneration and care of the community. It has become the duty of public instructors to incorporate into the school curriculum under their charge a liberal proportion of nature study, that the pupils may learn to act with understanding and discrimination when the question of trees and their care becomes a personal one. Let laws be enacted in every State that will at least provide a sensible method of control and management of our shade and highway trees. —Park and Cemetery.

### Conifers in Golden Gate Park.

A few years ago one would have been laughed at if he had prophesied that trees and shrubs of various kinds could be made to grow where this beautiful park now is. At that time it was made up of scrub oak thickets, sand dunes, loose blowing sands and a few rocky hills. Today, however, under the supervision of its present superintendent, John McLaren, it has risen to be one of the most beautiful parks in the world. The loose sands and sand dunes have been tied down with grass transplanted by hand. The grass was followed by *Pinus insignis*, that wonderful quick growing pine of California, *Pinus pinaster* or *Maritima* of Europe, and *Acacias* and *Eucalyptus* in varieties. In the shelter of these trees are now found trees and shrubs from all the known parts of the world. As the park site is exposed to the fierce winds direct from the ocean nearly all of the larger growing trees are evergreens, both *Coniferæ* and broad leaved evergreens. Mr. McLaren has undoubtedly the largest collection of conifers in the park of any collection in the United States, although his collection is of recent date. We find many rare trees in the ground set aside for this collection and at other points in the park. The coast species make a much more rapid growth than the natives of the eastern part of America or Europe. The eastern varieties *do not* grow any faster there than in their native habitat. I have raised seedlings from eastern species, European species and native California species and found the above to be true. —T. H. Douglas in Park and Cemetery.



At least twenty cities are using or are preparing to use oil on the streets this summer. At this time let us advise that accurate notes be kept in each case as to all the conditions under which oil is to be applied, so that at the close of the season the notes can be compared and results noted. This year's experience, if properly recorded, may be worth thousands of dollars to the cities of the state.

## What the Cities are Doing

Corona has a new jail costing \$700.

Winters has bought a sprinkling wagon.

Healdsburg's trustees are considering sewer plans.

San Mateo has received bids for a fire alarm system.

Redlands has \$50,000 street improvement bonds for sale.

Fresno is investigating the septic-tank process of sewage disposal.

Colusa is now out of debt, having redeemed the last outstanding bond.

Nearly every town in the State is discussing the use of crude oil on streets.

Riverside and Santa Clara are agitating the question of Freeholder's charters.

Redwood City recently sold a gas franchise for \$725 to the Peninsula Lighting Co.

Pasadena will receive competitive bids on June 28 for plans for a city hall and jail.

Pasadena has purchased land upon which it is proposed to erect a garbage crematory.

James Stanley is constructing a salt water system for street sprinkling at San Rafael.

Eureka has rejected all bids for material for its new sewer system and will re-advertise.

Woodland is engaged in extending its outfall sewer for a distance of two and a half miles.

The Mountain View Board of Trade is agitating the question of incorporating the town.

Yreka has offered its water works bonds for sale. The issue is \$55,000 at 5 per cent interest.

Sacramento will on July 7th receive bids for installing a 10,000,000 gallon pump for its water works.

Vallejo will soon advertise for bids for furnishing material for the improvement of its water system.

Salinas has ordered a census to be taken of the city, preparatory to the framing of a freeholder's charter.

Kern's Board of Trade urge the town trustees to issue bonds to the amount of \$15,000 for municipal improvements.

Eureka has fixed its tax rate at 90 cents on the \$100 which includes 10 cents for high

school and 23½ cents for the bond fund.

The contract for the construction of Alameda's new Carnegie library has been awarded to C. F. Foster & Son for the sum of \$29,497.

The sum of a million and a half of dollars has been expended in the improvement of Berkeley's streets during the past ten years.

Palo Alto trustees have refused to grant any franchise for laying gas pipes in the town, intending to have a municipal system when the time comes.

Santa Rosa will construct a modern septic tank in connection with its sewage disposal works. The septic process has existed there in a crude way for some time.

Santa Paula incorporated on Apr. 7th and Porterville on May 3d, making 123 municipalities in the State. Sebastapol votes on the same question on May 27th.

San Mateo trustees have declared war on the neighboring tribes of mosquitos which breed in the stagnant ponds in the vicinity. Crude oil will be applied to the surface of the water.

The excavation and foundation work are well advanced upon Santa Monica's new town hall, the contract for its construction having been recently awarded at a price just below \$30,000.

Pasadena has commenced to purchase land for a system of public parks, for which bonds were recently issued. Thus far the tracts purchased are small and situated in different parts of the city.

C. D. Vincent was awarded the contract for the construction of Chico's sewer system for the sum of \$21,437 and the work is well under way. N. Clark & Sons were awarded the contract for the material.

Recently a new census was taken at Sacramento, Stockton and Merced. Sacramento shows a population of 32,623, a gain of over 3000 since 1900; Stockton has about 21,000, a gain of 3500, and Merced has 2134, a gain of 184.

Nevada City has ordered the construction of a new steel bridge across Deer Creek and Clark & Henry of Stockton were awarded the contract, the price being \$10,143. No bond issue for this purpose has been necessary, as the funds were in the treasury, mainly as the revenue from the water system.

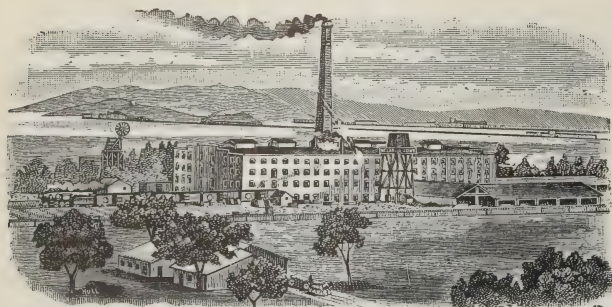
Oakland's council has announced its intention to submit a bonding proposition aggregating over \$2,000,000 for various purposes. This does not include a proposition for municipal water works, but it is promised to also submit this proposition as soon as the committee recently appointed by Mayor Barstow reports a definite scheme for the acquirement of this public utility.



TELEPHONE MAIN 771.

INCORPORATED JAN. 11, 1889

N. CLARK and SONS,



WORKS AT ALAMEDA

MANUFACTURERS OF

Sewer Pipe, Chimney Pipe,  
Caps & Tops, Architectural  
Terra Cotta, Hollow Tile Fire  
Proofing, Pressed Brick, Fire  
Brick, Tile, etc.

Office 17 & 19 Spear St.

San Francisco.

TELEPHONE SOUTH, 90.

**STEIGER** **TERRA COTTA & POTTERY**  
**WORKS.**

MANUFACTURERS OF  
HOLLOW TILE FIRE PROOFING  
SALT GLAZED SEWER PIPE, PRESSED BRICK.  
ARCHITECTURAL TERRA COTTA  
HOLLOW BRICK, PAVING BRICK, DRAIN TILE,  
CHIMNEY PIPE & TOPS, FLOWER POTS ETC.

**FIRE BRICK**



W E DENNISON,  
PRESIDENT.  
J. W. McDONALD, JR.  
SECRETARY.  
L. A. STEIGER,  
MANAGER.

Office and Yard: 1556 to 1564 MARKET ST.  
and 127 to 131 CITY HALL AVENUE.

Works:  
SOUTH SAN FRANCISCO  
SAN MATEO CO.

SAN FRANCISCO, CAL.

J. P. K. OTIS,  
President & Manager.

EDW. P. KING,  
Treasurer & Supt.

UNION WATER METER CO.  
Worcester, Mass. METERS

Union Rotary Piston and Columbia Patterns

Pacific Coast Agent: G. FRANK OTIS, 440 So. Los Robles Ave., Pasadena, Cal.



**BRUN OIL**

A new system. Perfect combustion.  
Highest Evaporation.

Write for Particulars and Tests.

Send us data of your present performance  
and get our guarantee of saving or pro-  
posal to install our system for the saving-

**Tracy Engineering Co.,**

151 Fremont St., San Francisco

# CALIFORNIA MUNICIPALITIES

VOL. 6.

JUNE, 1902

No. 5.



MUNICIPAL WATER, GAS AND ELECTRIC WORKS, SANTA CLARA, CAL.

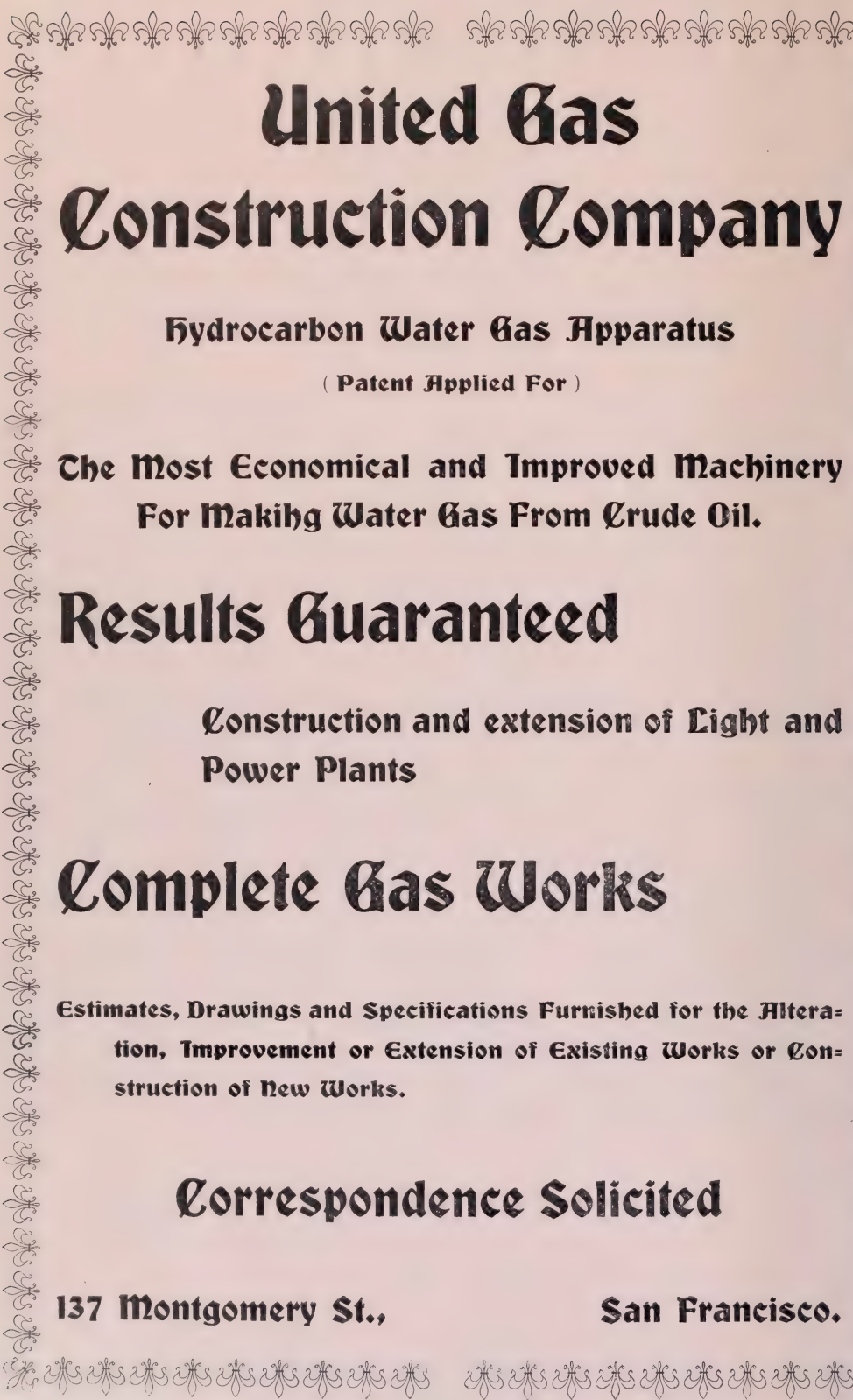
SAN FRANCISCO OFFICE . . . . .

ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.





# **United Gas Construction Company**

**Hydrocarbon Water Gas Apparatus**

( Patent Applied For )

**The Most Economical and Improved Machinery  
For Making Water Gas From Crude Oil.**

**Results Guaranteed**

**Construction and extension of Light and  
Power Plants**

**Complete Gas Works**

**Estimates, Drawings and Specifications Furnished for the Altera-  
tion, Improvement or Extension of Existing Works or Con-  
struction of New Works.**

**Correspondence Solicited**

**137 Montgomery St.,**

**San Francisco.**

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 6. June, 1902. No. 5

## California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.

Office of Publication, - - - - - SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

### CONTENTS.

#### EDITORIAL.

Notes.....	151
The Parking of City Streets.....	152
Public Bonds Should Not be Taxed..	154
Municipal Socialism in England.....	159
Information on the Subject of Free- holders' Charter.....	163
Why the Political Mayoralty?.....	165
Public Ownership of Public Utili- ties is Bound to Come—Pro- gress Toward Public Account- ability .....	167
Forming an Improvement Society...	168
Interesting Figures from a Town Report.....	169
Franchises—Competition—Taxation-- Oiled Roads are Successful.....	170
The Opportunity of a Mayor—Vil- lage and Town Improvement.....	171

#### LIBRARY DEPARTMENT:

Preservation of Local History.....	172
Brief Library Notes—Features of New Library Law.....	175
New Method to Determine Speed of Cars—Oiling Specifications...	175
Against Licenses—For Civic Beauty-- Personal.....	176
What the Cities are Doing.....	177

The editor took a vacation last month; hence the delayed appearance of the June number.



Most cities start a new fiscal year this month. Let the aim be to make it replete with progressiveness.



Attention is called to an article in this issue explaining the provisions of the new library law. This clears up any misconceptions of the law that may have heretofore existed.



The idea that almost anyone can manage the affairs of a municipality is rapidly changing. In reality it requires the services of an expert and the people are commencing to realize it.



The annual message of Mayor Barstow, of Oakland, has been issued in pamphlet form and contains much valuable information and proper suggestions concerning the affairs of that city.



It is a noticeable fact that eastern cities are issuing bonds at an interest rate as low as 3½ per cent. Here we do well if we float bonds bearing four per cent. Why the difference? Is it because we make them subject to taxation?



**The Parking of City Streets** The time is near at hand when California cities will pay attention to the improvement of their streets by adding to their artistic effects. For many years our public highways have been treated from the utilitarian point of view—the accommodation of traffic. The energies of city officials have been devoted to matters of macadamizing, grading, paving, the construction of sidewalks, gutters, curbs and cross-walks. The problems connected therewith have been pretty nearly worked out. The question of keeping them presentable is now before us. We can keep the roadway in fair condition for use and the concrete sidewalks are always in good order, but the trouble is to keep that portion of the street not used for actual travel in a shape that will appear half-way decent.

The nightmare of city officials is how to keep the weeds out of the streets. Many expedients have been tried. Ordinances requiring property-owners to remove the weeds have been passed, but have usually failed in the enforcement. Threatened arrest sometimes proves effectual as against actual residents, but as against non-resident property-owners the threats are inoperative. Sidewalks are more often cleared than is the area between the curb line and the carriage track. Sometimes the town removes the weeds and then tries to collect the cost from the property-owners. It never tries this plan but once.

We believe that the correct solution is not to have any place for weeds to grow. In other words, where weeds can grow, in their place should be grown something which is ornamental.

The streets should be parked and planted to grass, shrub and flowers.

That is the solution.

And it will pay.

As an investment it will enhance the value of property on all streets that are properly parked, enough to pay for the cost of the work.

The parking of a street must be done by the city and maintained at the city's expense; otherwise it will not be properly done.

The details as to how this work should be done are yet to be worked out. This is one of the problems of city betterment that must soon be solved and there is need for the application of intelligence of a high order. But we believe that it can be done.

The first city with properly parked streets will receive marked attention. It will attract visitors and home-seekers. It will grow and we predict that it will grow faster than anyone dreams of.

Where is the town and the man who will work along the lines suggested?



The Santa Clara ADVOCATE is a new monthly publication, devoted to the subject of local improvements in the town named. It is the official organ of the Commercial League of that city and as a matter of course, devotes considerable space to municipal affairs. In this connection a suggestion is pertinent: Would it not be a good thing if every local improvement club could issue such a publication once a month? Many of the local organizations, especially the Women's Improvement Clubs would find it a source of revenue. And it would be a valuable educational medium. Let us have more of these publications.



Towns will find it an advantage if they could get a title in fee simple to all their streets. It would give the cities more complete control over them and they could better regulate the planting of trees and the placing of poles for electrical uses.

A little over a year ago, in the course of a short article in relation to the municipal affairs of the city of Stockton, published in this magazine, the remark was made that the streets of that city were exceptionally dirty. A visitor to that place at the present time will not make such a remark. About nine months ago the machine sweepers were banished from the principal streets and the hand system was introduced. The change has been highly beneficial and the cost is but a little more than it was under the old method. The business men are much pleased with the change and the machines will stay banished.



A uniform system for municipal accounts and reports would place a mass of information in the hands of officials and tax-payers that would be worth a great many thousands of dollars and insure economy that would be otherwise unattainable. It is a practical scheme and should be adopted in this State. Such a system is about to be adopted in Ohio.



The League membership advanced to seventy-nine during the month of June. The following cities showed the necessary progressive spirit to join the association: Whittier, Sonora, Etna and Ferndale. There are only a few towns left that do not belong and the probabilities are that most of these will come in during the year.

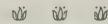


If the promoters of "additions" to the sub-divided area of cities would have the foresight to dedicate an occasional lot or block for parks and play-grounds they would find it would be an advantage in selling lots; in time it would make the land about there more valuable.

MUNICIPALITIES would be thankful for photographs suitable for publication. The scenes photographed should have some connection with municipal affairs. A nicely-laid out street, municipal buildings (not school houses), park scenes, public works, etc., are what are wanted. Also if any city official will "write-up" some special feature of his municipal activity it will be given publication. Will our official friends kindly favor us?



Several cities requiring the application of power contemplate substituting electricity for steam. Don't do it except on the advice of a highly competent engineer. Electricity has not yet become as cheap as steam, especially for heavy duties, such as running pumping stations.



San Francisco is considering a number of charter amendments. One proposition is one which will permit the city to do its own street sprinkling and sweeping instead of by contract. Another one is proposed to simplify the method of issuing bonds so that it will be possible to acquire public utilities.



Do not forget that the question as to whether or not municipalities are to continue to operate public utilities is to be decided at the polls next November. If Assembly Constitutional Amendment No. 28 is adopted it means good-bye to all schemes of municipal ownership.



Partial reports are published from time to time concerning the effect of oil upon streets. A number of cities are trying it for the first time this year and so far the reports are very satisfactory.



## PUBLIC BONDS SHOULD NOT BE TAXED.

BY PROF. CARL C. PLEHN, BERKELEY.

Under the laws of California all public bonds owned by private individuals, except those issued by the government of the United States, are liable to taxation if they are found by the assessors within the State. Thus bonds issued by the State of California, by any county or by any municipal corporation within the state may be assessed for taxation and are taxable for state, county and municipal purposes. That this is the law is clearly decided by the Supreme Court of the state as long ago as 1866 in the case of the *People vs Home Insurance Company*. This case has not, so far as I have ascertained, been disturbed in any essential particular either by subsequent decisions, by the constitution of 1879 or by any subsequent legislation. Such bonds are not taxed if owned by any branch of the government, or if, being kept outside of the state, they are owned by persons who are not residents of the state. But if owned by a resident of the state they are taxable even if they are kept outside of the state. This latter provision has, however, a merely theoretical interest and is of no practical importance as bonds outside the state certainly cannot be found by the assessor unless the owner chooses to declare them.

But while these bonds are, theoretically, taxable they are not all taxed. Most of them evade taxation. In general this evasion is accomplished in some perfectly proper and legal manner, but in a few instances the evasion is accomplished by concealment and is consequently accompanied by perjury. All of the state bonds, very nearly all of the county bonds and a goodly portion of the city bonds are either owned by the state or are held in trust by some branch of the government for the support of the public schools or of public institutions and are consequently exempt from taxation. Most of the remainder of the county bonds, of the city bonds and a smaller part of the school district bonds are owned and kept outside of the state and are consequently not assessed or taxed. Nearly all of the remaining bonds which are owned by residents of the state are successfully concealed from the assessors by their owners who thus regularly commit perjury, once every year, in swearing to a false list of their property. A very small amount, including far more school bonds than any other variety, are actually assessed and taxed. There is no possibility of ascertaining the exact amount actually taxed, as the assessors do not segregate these bonds from other forms of money and solvent credits. It has been variously estimated by well informed persons at from three to ten per cent of all local indebtedness.

The provision of the law which makes these bonds taxable is, therefore, of practically no effect so far as providing revenue is concerned, but its retention on the statute books has certain indirect consequences which are important.

## GENERAL CONSIDERATIONS

The taxation of public bonds is an unsound piece of financiering in any event and is not practiced by any reputable national government. It is unsound financiering because the logic upon which it is based is faulty; because it cannot, even if successfully administered, bring into the treasury any money which would not otherwise be there; because it takes out of the treasury, for a time at least, some of the money already there; and because the retention of the right to tax the bonds is a proclamation of the privilege of acting in bad faith which necessarily hurts the credit of the government and makes the loan cost more than it otherwise would. The lender will certainly expect to clear the market rate of interest on his investment. If he has to pay taxes upon the bonds he will demand a gross rate of interest which will leave him the market rate net after payment of taxes. If the lender is not taxed on the bond he will be content with the market rate of interest in the first place or what is the same thing if the bond bears a higher rate will pay a premium. The imposition of the tax, if fully successful, which it rarely is, simply amounts to this, that the treasury pays out, in additional interest, a certain sum of money which it then proceeds to collect back again from the recipients by taxation. This obviously involves several elements of trouble and expense. In the first place the government is out of the use of its money for the interval between its payment and its collection. Then it has the expense of paying out money which it already has in the treasury and of collecting it again; a two fold handling, to say nothing of the clerical expense connected with the assessment and collection of the tax. The lender is also put to the same two items of expense and of trouble for which he will certainly have to be compensated at the expense of the government. It would certainly

seem common sense, when the money is once in the treasury to leave it there and use it in the legitimate business of the government, and not to turn it over to some one else to use for several months in the expectation that it can be collected again.

Practically, however, the matter is still worse than in the hypothetical case above assumed. There is no certainty as to what the tax rate is going to be from year to year, and from this uncertainty the lender must make the government pay. If the tax rate averages \$1.75 per hundred but occasionally rises to \$2.00 or a little over, the lender, to insure himself against loss is compelled to demand a higher rate of interest or what is the same thing, will buy the bond only at a discount. A few years ago I ascertained exactly how much this charge for insurance against fluctuations in the tax rate amounted to in the analogous case of mortgages in California. The figures were published in full in the Yale Review of 1899. They have been accepted as conclusive. The exact amount of this charge was found to be on the average 0.381% or a little over one-third of one per cent. It is safe to assume that in the case of public bonds it is very little if any less. To be conservative we will place it at one-fourth of one per cent. Then it is clear that if the bonds were actually taxed, which they are not, the process of taxation would increase the cost of the loan by at least one-fourth of one per cent per annum.

Continuing the supposition, upon which the existence of this provision of the law is based, namely that the taxes are actually assessed and collected, let us see how it would work out in the case of an ordinary California city. We will assume that the city wishes to borrow \$10,000 on 20 years bonds, that the market rate of interest at the time is 4%, that the taxes, state, county and city together are ordinarily about \$1.75 per hundred but range occasionally as high as \$2.00. The city's share of this tax is probably about \$1.00 and the remainder or \$ .75 goes to the county and the state. Under these circumstances the lender if he is certain to have to pay the tax will demand 6% interest, that being the lowest rate at which he can afford to make the loan. The city then obtains \$10,000 for which it pays \$600 a year for twenty years, and repays the principal at the end of the term. The total cost of the loan is thus \$12,000, from which we must deduct the taxes collected. The total taxes, if successfully collected, will amount to \$3,500 during the 20 years, of which the city obtains \$2,000, \$1,500 going to the state and county. Thus the net cost of the loan is \$10,000, out of which \$8,500 has remained with the lender and the city has made a contribution, out of its own special taxes for the support of this loan, of \$1,500 to the support of the state and the county a part of which of course comes back to the citizens in the form of the benefits of government and a reduction in other taxes. If, however, the bonds had been untaxed the city would have had the benefit of the market rate of interest or 4% and the net cost of the loan would have been \$8,000, a clear saving of \$2,000, or if we take into consideration the \$1,500 contributed to the state and county, the value of which to the city is at least problematical, there is a clear saving of \$500. Meanwhile for from six to nine months each year the city has been out of the use of \$200, which it has advanced to the lender to enable him to pay his tax on the bonds.

The following statement includes all the more important items:

Cost to a city of \$10,000 loan.

IF TAXED.		IF UNTAXED.	
Interest, 20 years, at 6% .....	\$ 12,000	at 4%, ....	\$ 8,000
Taxes turned over to State and County from city funds. ....	1,500		
Expenses of assessment and collection of taxes at \$5.00 per annum for 20 years. ....	100		
Loss of interest on money periodically advanced to lender, estimated at 6% on \$200 for 6 months each year, for 20 years. ....	120		
Gross cost. ....	\$ 13,720		\$ 8,000
Less taxes collected, ....	3,500		
Net cost, ....	\$ 10,220		\$ 8,000

Such would be the inevitable result if the law were administered in the spirit in which it was enacted.

PRACTICAL OPERATION

Foolish laws are usually inoperative, or at least produce results which are very different from those intended. It has ever been so with usury laws to which this law is closely related



and it is so in this case. As has been said before, all local bonds, except school bonds and some few municipal bonds, escape taxation either legally or illegally. The result is that the effect of the tax is not discernable in the rates of interest charged. Lenders, knowing that they can legally or illegally evade the tax, do not always add the full amount of the tax to the market rate of interest when making their bids for the bonds. They do, however, add a little something to the rate by way of insurance against being caught by the assessor occasionally during the twenty years, more or less, which the bonds have to run.

I have been able to compile enough information concerning the outstanding bonds to show the full effect of the present system of subjecting them to taxation. The following tabular comparisons of the rates, include all county bonds, practically all municipal bonds and enough of the school district bonds to be representative.

Bonds issued by irrigation districts have not been included because these bonds have been involved in litigation and were issued under circumstances which made the rate of interest entirely non-typical. Extreme and obviously exceptional cases of both high and low rates have been omitted in order that the comparisons may be perfectly fair and as conservative as possible. Certain items in these tables being somewhat unusual a word or two of explanation may be necessary. The term "mode" as applied in these tables is used to indicate the points of greatest density or frequency; i. e. the rates at which a large number of the loans are made. The "mode" is a far truer, more representative, form of the average than the simple arithmetical mean which is perhaps more familiar. For, as a matter of fact, no loans are ever made at the average or mean rate while many are contracted at the "modes" or the typical rates. In all the cases under consideration there were found to be two decided "modes" or points of great frequency. One of these, the higher, coincides generally with the rate for a large number of small loans, while the other, the lower, is the rate for a smaller number of comparatively large loans. As a rule the total amount loaned is greater at the lower rate, although the number of issues is smaller.

#### CALIFORNIA LOANS.

(Three tables)

**Table I—Nominal Rates of Interest on Municipal Loans**

*Deduced from information concerning loans amounting to \$10,801,835.*

Average Rate. Simple arithmetical mean; i. e., total interest payable in one year divided by total principal .....	4.68%
Higher mode; i. e. most frequent rate for small loans, .....	5.00%
Includes 42% of all issues and 23% of total amount borrowed.	
Lower mode; i. e. most frequent rate for large loans, .....	4.50%
Includes 18% of all issues and 25% of total amount borrowed.	
Lowest,* .....	4.00%
Extreme and obviously exceptional cases excluded,	
Highest .....	8.00%

\*Los Angeles floated a water works loan in 1901 at 3¾% net.

**Table II.—Nominal Rates of Interest on County Loans.**

Average rate (as above) .....	4.85%
Higher mode; i. e. most frequent rate for small loans .....	5.00%
Includes 32% of all issues and 25% of total amount borrowed.	
Lower mode; i. e. most frequent rate for large loans .....	4.50%
Includes 20% of all issues and 33% of total amount borrowed.	
Lowest } .....	4.00%
Highest }	Extremes cases,—one small loan at 8% omitted.
	7.00%

**Table III—Nominal Rates of Interest on School District Loans.**

*Deduced from information covering loans amounting to \$555,380.*

Average Rate (as above) .....	6.58%
Higher Mode; i. e. most frequent rates for small loans .....	8.00%
Includes 55% of all issues and 28% of total amount borrowed.	
Lower Mode*; i. e. most frequent rate for large loans .....	6.00%
Includes 18% of all issues and 34% of total amount borrowed.	

Lowest .....	5.00
Highest .....	8.00
*21% of all issues and 20% of total amount borrowed were at 7 ..	

**United States at Large. Issues of 1901.**

(One Table)

Nominal Rates of Interest on State, County, Municipal and District Bonds issued in all parts of the United States in 1901:

Average Rate (as above) .....	3.72%
Higher mode; i. e. most frequent rate for small loans .....	4.00
Includes 21% of the total amount borrowed.	
Lower mode; i. e. most frequent rate for large loans .....	3.50.
Includes 52% of the total amount borrowed.	
Range, exceptional cases omitted .....	3.00% to 5.00%
N. B. Only 2% of all issues were at rates higher than 5%.	

The Commercial and Financial Chronicle of New York recently published a summary of all state and local bonds issued in 1901 in the United States. According to this summary over 60% of all issues were at the nominal rates of 3 and 3½%, 52.4% being at 3½% nominal interest; only 18% of the total amount was issued at rates over 4%. There have been, so far as I can ascertain, no bonds issued by the local governments in California at a nominal rate of interest less than 4%, with the sole exception of \$2,000,000 water bonds successfully floated at par last year by the city of Los Angeles at 3¼%. Of the bonds issued in California last year, omitting the \$2,000,000 loan just referred to, 10% were at 4% nominal interest, 45% at 4½%, 25% at 5%, and 20% at rates higher than 5%. The usual rate for local bonds is therefore higher in California than for the United States at large by about 1%. A part of this is of course due to the difference in credit enjoyed by the cities east and west, but a part is doubtless due to the possibility that these bonds may be subject to taxation. How much this amounts to it is not possible even to estimate. The difference in credit is, however, in turn due, in part at least, to the existence of this law which makes the bonds liable to taxation; for it forces the cities to sell their bonds to persons outside the state, who, not being familiar with the local conditions, have not the same confidence in the cities that local investors would have.

It will be noted that in the above tables and comparisons we have used the nominal rates only. It would have been better had we been able to ascertain the exact return these bonds yielded as investments, taking into consideration the premiums paid or discounts required in each case. It has, however, proven impossible to obtain the necessary information in all cases. Enough has been ascertained, however, to show that the premiums allowed have not been sufficient to seriously affect our conclusions.

The figures given in the tables apply only to bonds now outstanding, few of which were issued prior to 1890. The same general conditions but with larger rates of interest have prevailed in the past. In the early days the rate of interest required upon such bonds, even when their legality was not in doubt, was practically the same as that required on first class mortgages. That is, the rate of interest was amply high enough to allow for the payment of taxes by the lender. Since 1880, however, there has been an improvement. It was discovered that taxation could be evaded, new markets outside the state were entered, and the rate of interest follows much more closely the market rate on good commercial loans. That is to say it has been between one-half and one per cent higher than it should be for well secured public bonds.

Perhaps the worst feature of the whole situation is the effect of this law upon school districts which resort to borrowing. Counties and cities can borrow outside the state and thus avoid the difficulties to which this law gives rise. School districts usually have to borrow at home. This is for two reasons. In the first place they are not known outside of the state and it would be expensive for an eastern bank or capitalist to ascertain their legal standing. In the second place they borrow in comparatively small sums so that the expense of negotiating the bonds at a distance is prohibitive. Hence in most cases they are obliged to resort to the local bank or some local capitalist. If the bank takes the bonds it is sure to be taxed for them just as it is on a mortgage. If some local capitalist takes them he too has to assume that he will be taxed on them although of course he may succeed in evading the assessor. The result is that the poor school districts have been paying in the past from 7% to 8% interest when they could easily



have borrowed at 5% or at most at 6% if the bonds had not been taxable and they are now required to pay from 6% to 7% instead of from 4% to 5% which they could surely enjoy.

The result is a very serious depletion of the school funds. Under the usual run of events the bonds escape taxation and the disirict is out the full amount of excess interest. Under the most favorable circumstances it still suffers. Let us suppose a typical school district wishes to borrow \$10,000 for a new school building. It has to borrow from the local bank and has to pay at least 6% or 6½% interest when it might have the money at 4% or at 4½%. Out of the \$200 per annum excess interest there may be collected in taxes \$150 of which the district receives \$38, the balance \$112 going into the state and county treasuries. This with the \$50 extra makes the loss to the school funds \$172 per annum on this loan. This is no merely hypothetical case, but is a thoroughly typical case based on the actual averages with the assumption that the rate of interest is the most favorable that a school district can obtain. In most cases the loss is much greater. There is in this case no compensating advantage in the reduction of other expenses. It simply amounts to this that the people of the school district pay from \$162 to \$200 more than they should each year for the \$10,000 loan. Such a loss to the school funds is a serious matter as the schools are nowhere any too well supplied with money.

The following statement shows the effect of this taxation on the school funds.  
Annual cost to a school district of a \$10,000 loan:

IF TAXED		IF UNTAXED	
Interest at 6% .....	\$ 600	at 4%....	\$ 400
State and County taxes.....	112		
Interest on money advanced to lender for payment of taxes.....	6		
Gross cost.....	\$ 718		\$ 400
Deduct taxes collected.....	150		
Net cost.....	\$ 568		\$ 400

To sum the matter up and reduce our results as nearly as possible to exact figures, making every allowance for each uncertain element and keeping well within the mark, it is safe to say that the continuance of this law making public bonds taxable is costing the people of the state unnecessarily \$367,500 per annum. That is estimated on the basis that the rate of interest on county bonds is raised only one-half of one per cent, that the increase on municipal bonds is the same and that the increase on school bonds is the full 2%, as it undoubtedly is.

There is one other phase of the subject which requires mention. We have found that these bonds evade taxation mainly by seeking markets outside of the state. This has its advantages and disadvantages. On one side it brings into the state a certain amount of capital which might not otherwise come and sets free a like amount of local capital for investment in local industries. On the other hand it makes these loans cost somewhat more than they should and imposes a certain impediment to the free circulation of capital which is not desirable. If local banks and capitalists could compete for these bonds it is probable that their standing would improve in the eyes of outside investors to the advantage of government treasuries and quite as much outside capital would be obtained.

The moral effect of having a law on the statute books the intent of which can be, indeed must be, evaded whether by legal or illegal processes is always bad. It breeds contempt of law. When this contempt affects our revenue system it strikes our government at a vital point. Perjury in connection with the returns made to the assessor is a common crime to which many men unblushingly confess. Yet it is a serious crime, the cause of gross injustice between man and man. It enables the perjurer to retain for his own use money which belong to the government and throws upon the honest man the cost of those benefits which the foresworn enjoys. The revoking of the law which makes local bonds subject to taxation will remove one of the common temptations to perjury and it will at the same time conserve the public monies. The support of the proposed amendment is to be recommended to all patriotic citizens.



## MUNICIPAL SOCIALISM IN ENGLAND.

CONSULAR REPORT OF JAMES BOYLE, PUBLISHED IN MUNICIPAL JOURNAL AND ENGINEER.

For some years past, there has been a quiet but generally increasing development of a certain phase of socialism in Great Britain. Reference is made to what is generally known as "municipal trading" and sometimes, and more correctly, as "municipal socialism." The first appellation is rather a misnomer at the existing stage of the movement. Municipal socialism does not mean a division of private wealth or property "share and share alike," but the ownership and operation of certain undertakings and enterprises (in America generally described as "public utilities") by the municipality for the public good, as claimed. As generally explained, the enterprises within the proper sphere of municipal socialism are "public necessities." But here arises the question, Where is the line to be drawn? This line is by the great majority of advocates of the system drawn at those enterprises and undertakings which by their very nature are essentially public or semi-public in their functions, and which are of necessity more or less monopolies—as, for instance, street railways, water works, gas lighting, electric lighting, and electric power. Incidentally, it may be mentioned that the domain of "national socialism" has been entered into by the British Government by its ownership of the telegraph system and by its proposed gradual absorption of the telephone system; and a movement has sprung up for the nationalization of the railroads, and even of the coal supply, as well as of storage of wheat for use in case of war.

## MUNICIPAL UNDERTAKINGS AND CAPITAL INVESTED.

In 1875, the capital invested in municipal undertakings in Great Britain was \$155,000,000, while in 1900 there were \$1,500,000,000 invested.

There are now in Great Britain 931

municipalities owning water works; 99 owning the street railroads (or "tramways," as they are called here); 240 owning the gas works; and 181 supplying electricity. Most of these are in England. Municipalities were not allowed to work the tramways until 1896. It is estimated that half of the gas users in England use municipal gas. In a number of places—Liverpool among them—the municipalities supply electricity for lighting and power, while the gas supply is still in the hands of private corporations. In the case of Liverpool, the gas company is quite willing to sell to the municipality, but the latter will not buy; first, because under the charter of the gas company, the municipality would be compelled to pay a perpetual dividend of 10 per cent. to the stockholders, and, secondly, because it is believed that in the near future electricity will practically supersede gas as an illuminant.

## GREAT VARIETY OF CIVIC VENTURES.

The municipalities of Leamington and Harrogate own Turkish baths, two of the best at present existing in Great Britain, and Harrogate also gives fireworks displays at municipal cost. Glasgow, like Liverpool, owns its water works and trams, and provides municipal lectures. Glasgow has quite recently reduced the fares on the tram cars, so that there are now not only half-penny (1 cent) fares, but a distance of  $2\frac{1}{2}$  miles can be traveled for 2 cents. Universal penny (2-cent) fares will probably shortly be introduced in Liverpool. The "transfer" system, as prevailing in America, is not used in Liverpool, nor in any other British municipality, so far as I know. Glasgow was the first city to establish a "municipal palace." Manchester owns shares in its ship canal. Out of its municipal tramway profits, Sheffield has appropriated



\$75,000 for the erection of shops and business premises, which it will rent. Quite recently, the northern townships outside of London bought the well-known Alexandra Palace, where the municipal authorities maintain an auditorium and give organ recitals and theatrical, military band, and variety entertainments of all sorts, and industrial exhibitions. Torquay owns a rabbit warren; Colchester possesses an oyster fishery; St. Helen's (a chemical center in this consular district) supplies sterilized milk; Hull owns a crematorium; Doncaster and Chester own race courses (the former actually managing the races); Bournemouth owns one of the finest golf courses in Great Britain; West Ham, a borough of London, owns a stone-flag factory; and Bradford owns a hotel—as also does Liverpool (on its water works property in Wales).

#### MUNICIPAL DOCKS.

Bristol has municipalized its docks and harbor, at a cost of between \$10,000,000 and \$15,000,000. The docks of Liverpool are municipalized in a modified way. The system is peculiar to Liverpool. This vast estate, valued at several hundreds of millions of dollars, is administered by a public trust, nearly all the members of which are elected by those who pay dock dues, and the profits, after deducting expenses and payment of interest on capital account, go to improvement, and not to the benefit of a private corporation. The probability is that the London docks will before many years be managed under either British or the Liverpool plan. Nottingham, in addition to owning parks, markets, artisan dwellings, baths, and a hospital, has bought a castle and a forest, and has a natural-history museum and a school of art, and was the first municipality in Great Britain to have a university college. The last item gives occasion for the statement that several English cities have within the last year or so taken up the ques-

tion of local universities. Birmingham has established one, and Liverpool will shortly follow suit.

#### LIVERPOOL OWNS ALL PUBLIC UTILITIES.

Liverpool is one of the foremost cities in municipal socialism. It owns the water works (one of the best systems in the world); it operates the street cars; it supplies the electric light and power; it has one of the largest and best public-bath systems anywhere and proposes to erect the finest Turkish bath in Europe; it provides public laundries for the poor districts; it furnishes flowers and plants for the windows in the slums; it sells sterilized humanized milk for the children of the poor at cost price; it has a salaried organist to play its famous municipal organ; it gives municipal lectures—and all these in addition to the usual undertakings of municipalities, such as parks with concerts, technical schools, etc. But the greatest socialistic undertaking by the Liverpool municipality is that of providing dwellings for the very poor, the dispossessed tenants of demolished insanitary dwellings of the slums.

The one great predominating question in connection with municipal socialism is the "housing question"—that is, the demolition of "slums" and insanitary dwellings and the erection by the municipality of suitable dwellings in place thereof. Americans who have never been here can have but little conception of the terrible conditions existing in many of the large cities of Great Britain as to the housing of the very poor. This condition is a heritage of former social and economic conditions, as well as of feudal land laws, and of the past indifference both of the municipalities and of Parliament, as well as of the public generally—even, it may be said, of philanthropists. But heroic efforts are now being made in many of the large cities, and Liverpool is in the front rank in the efforts to remedy this deplorable condition of affairs. Many

difficulties have been confronted and overcome which at first were thought to be insurmountable—and these in addition to the perplexing moral and social questions involved. One great difficulty is that of compensation to the owners of insanitary property. In England, the doctrine of “vested rights” is generally held very tenaciously. London has spent nearly \$15,000,000 in clearing away insanitary property. In some districts of London, it has cost from \$1500 to \$2500 for every family turned out. These large sums refer only to the clearances of the sums and to the compensation of the landlords, and do not include the amounts spent on the construction of new municipal houses. An agitation is being raised against the past generous compensation of owners of insanitary property, and it is claimed that under the present act of Parliament these owners can be prosecuted for allowing their property to become insanitary.

#### MUNICIPAL HOUSING SCHEMES.

Another great difficulty has been the question of providing an adequate number of suitable municipal dwellings ready for occupancy at the same time that the unfortunate dwellers of the slum houses are dispossessed of their tenancy. Inattention to this necessity has called forth indignant protests in the large cities of Great Britain where the municipal scheme has been adopted as a solution of the slum problem. Glasgow, for instance, is said to have had at one time 50,000 people turned out of their homes by the corporation (of course, not all together), while it only provided housing accommodation for 7000. In the initial stages of the municipal housing scheme in Liverpool, the same difficulty presented itself, but the “housing committee” of the corporation have recently pledged themselves that they will not undertake any scheme of demolition until they have provided adequate accommodation elsewhere for the dispossessed tenants. Under the

present act, municipalities are compelled to provide substitute accommodation for at least 50 per cent. of the dispossessed occupiers of slum property. The act under which municipalities demolish insanitary areas and erect dwelling houses seems to be of a most comprehensive character. It not only authorizes a municipality to construct a house, but it “may include a garden of not more than half an acre, provided that the estimated annual value of such garden shall not exceed £3” (say \$15). And the municipality, if it builds a cottage, can “fit up, furnish, and supply the same with all requisite furniture, fittings, and conveniences.”

#### HOW LIVERPOOL DROVE OUT THE SLUMS.

There are two principal slum areas in Liverpool—one in the north end of about 383 acres and another at the south end of the city of about 100 acres. Most of the houses in the two districts are structurally insanitary. There are rows of them built “back to back.” There are other districts where houses have been made insanitary by overcrowding and the habits of the people. The original number of structurally insanitary houses, when the corporation commenced operations, is estimated to have been about 22,000. Of this number, the corporation has demolished about 8000 and private owners and builders have demolished about 4000 more. There are still about 10,000 insanitary houses to be dealt with. The average number of persons in these insanitary houses is five per house. Slum houses in Liverpool are generally of three rooms, one above another, although, as a rule, the third or upper room (really a garret) is seldom used. Under an act applicable to Liverpool, passed in 1864, compensation is paid to the owners of insanitary property which is demolished, such property having been condemned on a presentment of the grand jury upon a report of the medical officer of health. The corpora-



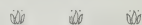
tion is also using the powers conferred upon it by a general act passed in 1890 providing for the "housing of the working classes." This act provides for compensation as a rule; but still, under a certain provision of the act, there may be a "closing order" against any house which is in a state so dangerous or injurious to health as to render it unfit for human habitation. If, on receipt of a closing order the owner makes the house fit for human habitation, nothing more is done; but should there be any default on his part, an order for demolition may issue without any claim for compensation, in case the premises are a danger to the health of the neighborhood. Under both the local act of 1864 and the general act of 1890, where the owner does not elect to retain the site, the corporation must of necessity acquire both land and buildings. In some cases, the land thus acquired is sold by the corporation to private individuals on which to build houses, subject to certain restrictions, so as to secure improved sanitary conditions. In other cases, the corporation itself has built blocks of dwellings. Already, nearly 900 tenements (or suites of rooms) have been erected, and 1,301 additional tenements (or suites of rooms) are in course of building, or contemplated.

#### THE TENEMENTS OF LIVERPOOL.

The Liverpool municipal dwellings are mostly in the form of blocks of tenement houses or "flats," three or four stories high. The local Government board (a bureau directly under the control of Parliament) insists upon certain provisions to meet the necessity of dispossessed tenants before sanctioning demolition operation. Until 1899, there had been a conspicuous failure to meet this obligation, but since then the wants of dispossessed persons have been carefully foreseen and met. The present policy is to have blocks of dwellings ready within convenient distance, into which dispossessed tenants can go immediately they remove from the con-

demned property. Most of these tenants are dock laborers or a like class. It is claimed that Liverpool alone among the municipalities of England and Scotland has been successful in supplying a type of building within the financial means of the poorest of the poor. A single room can be had for as low as 45 cents a week. The rent of two rooms ranges from 60 to 80 cents; that of three rooms, from \$1 to \$1.10; that of four rooms (the largest suites provided), from \$1.25 to \$1.50. The fixtures are simple, but superior to those supplied in like dwellings by private landlords. In a few dwellings, hot water is supplied. Others have gas, paid for on the "slot" principle. Two cents' worth is sufficient for four or five hours' consumption by one burner. Since Liverpool went into this enterprise, it has paid \$1,925,000 for demolished property, and, in addition, several pieces of land have been purchased, costing \$335,825, for the erection of municipal dwellings. The cost up to date for construction alone has been \$732,875. The total burden on the local taxation as the result of these combined operations amounts to 1¾d. in the pound sterling, or 3¼ cents on every \$4.86. The rents paid are insufficient by about 2 per cent. to meet the cost of the dwellings, without counting anything for a sinking fund, depreciation, etc. The present effort of Liverpool is to provide housing for the dispossessed tenants of condemned slums. It will probably take twelve years to complete this task. Then, the question of providing better accommodations for artisans and mechanics will possibly be faced. Liverpool, it is said, owns more revenue-producing real estate than any other municipality in the world, its income from this source being about half a million dollars a year.

*(To be concluded in July).*



## INFORMATION ON THE SUBJECT OF FREEHOLDERS' CHARTER.

The constitution of the State of California provides (Sec. 8 Article XI) that any incorporated city and town in the State having a population of more than 3,500, may adopt a freeholders' charter in the manner therein sent forth.

There are only three other states in the Union where constitutions contain similar provisions, viz, Missouri, Minnesota and Washington. The California constitution, however, contains an additional provision to the effect that cities having freeholders' charters shall not be controlled by general laws in municipal affairs.

The purpose of these constitutional provisions therefore is apparent; it is that the cities may establish and maintain a system of "home rule" in respect to their local affairs which cannot be interfered with by the state legislature.

The history of municipal legislation in this, as well as in other states, has been that the state legislature to a great extent passed laws that interfered with the administration of local affairs. These laws usually took the form of creating new local officers or boards, sometimes appointed by the Governor, and such offices were filled with political favorites in disregard to the necessities of the public service. The municipality had to pay the expense thus incurred and received no benefit. Other laws were enacted, ostensibly to effect one particular city, but by reason of their general nature affected many others to their serious disadvantage.

Hence there has been a general desire on the part of the larger cities to escape from the clutches of the legislature and at the present time fifteen cities have availed themselves of the constitutional privilege and have adopted Freeholders' Charters. These cities are San Francisco, Los Angeles, Sacramento, Oakland, San Jose, Stockton, San Diego, Berkeley, Fresno, Pasadena,

Vallejo, Eureka, Santa Barbara, Napa and Grass Valley. Last April Santa Rosa adopted such a charter which is to be ratified by the next legislature. Redlands and Watsonville now have a Board of Freeholders at work on charters for their respective cities, Riverside is about to call an election of Freeholders and in Santa Clara and Salinas the subject of instituting similar proceedings is under consideration. The following cities, in addition to those above named, have the population necessary to obtain such charters, viz, Alameda, Santa Cruz, San Bernardino, Santa Ana, San Rafael, Pomona, Bakersfield and Petaluma. Alameda framed such a charter two years ago but it was defeated by the voters. It will therefore be seen that the greater number of towns entitled to have Freeholders' Charters either availed themselves of the privilege or contemplate doing so.

## HOW CHARTERS ARE ADOPTED

The following is the section in the constitution on the subject of Freeholders' Charters:

SECTION 8. Any city containing a population of more than three thousand five hundred inhabitants may frame a charter for its own government, consistent with and subject to the constitution and laws of this state, by causing a board of fifteen freeholders, who shall for at least five years be qualified electors thereof, to be elected by the qualified voters of said city at any general or special election, whose duty it shall be, within ninety days after such election, to prepare and propose a charter for such city, which shall be signed in duplicate by the members of such board, or a majority of them, and returned, one copy to the mayor thereof, or other chief executive officer of such city, and the other to the recorder of the county. Such proposed charter shall



then be published in two daily newspapers of general circulation in such city, for at least twenty days, and the first publication shall be made within twenty days after the completion of the charter; provided that in cities containing a population of not more than ten thousand inhabitants, such proposed charter shall be published in one such daily newspaper; and within not less than thirty days after such publication it shall be submitted to the qualified electors of said city at a general or special election, and if a majority of such qualified electors voting thereat shall ratify the same, it shall thereafter be submitted to the legislature for its approval or rejection as a whole, without power of alteration or amendment.

#### HOW THESE CHARTERS OPERATE.

The operation of these charters has not been equal to expectations. It has been popularly supposed that the effect of giving to local bodies the right to frame a municipal charter would be to secure a more effective and more economical administration of local affairs. But this result has not always been accomplished. The mistakes that have been made are largely the result of a desire to place undue restriction upon the exercise of municipal powers. Freeholders have apparently been imbued with the idea that public officials were not to be trusted and hence have sought to limit their powers by prescribing the particular form and manner in which the public affairs should be administered, and detailed the method for conducting the affairs of each department of the city government. The result has been a serious loss of effectiveness on the part of the municipality, for these restrictions usually operate to prevent good work as well as to prevent evil practices. A great many needed improvements have been prevented because they were antagonistic to some charter provision. Thus the ownership of public utilities in San Francisco is

being prevented because of many impractical charter provisions in relation to the issuance of bonds.

An axiom to be borne in mind by charter-makers is that a dishonest official will violate a charter provision as quickly as he will the moral law "thou shalt not steal." Hence the absolute futility of restraining immoral acts by charter provisions.

The failure to realize this truth is the reason that we have such a poor quality of charters in this state. The charters are long, filled with useless details, with many contradictory provisions, and there is not a Freeholders' Charter in the state but that is subject to amendment.

But the framing of these charters is a good thing in the matter of educating the people to a realization of the responsibilities of self-government. The act of framing and adopting a charter causes an amount of public discussion that is productive of good. Ideas are disseminated that would otherwise be dormant. Interest in municipal government is stimulated and the ability of the people to appreciate a better municipal government is materially advanced, for the truth is that we receive and retain only that measure of good government that people are able to appreciate.

So the Freeholders' Charters are by no means failures. Advances are continually being made.

We are being taught, not so much what to do, as what to avoid doing. Sometime we will, perhaps accidentally, learn just what to do.

#### Experts are Necessary for Expert Work.

[PUBLIC POLICY.]

The "by gosh" period of American life is gradually being superseded by a period of educated refinement. The people can govern best when they secure for their service those best equipped to perform the duties imposed upon them. Declarations of principles and public policies must come from the peo-

ple if all interests are to be properly considered and served. Administration must be intrusted to those most capable of it if best results are to be obtained. The general government is setting a good example in employing experts whenever expert work is needed. An instance which the whole country will appreciate is found in the commission of experts charged with the duty of making Washington the most beautiful city in the world. If properly sustained this purpose will be accomplished.



### Why the Political Mayoralty?

BY HENRY PRATT JUDSON, DEAN OF THE  
CHICAGO UNIVERSITY.

One of the oddest facts in the development of municipal government in our democratic republic is the trend toward mayoral autocracy. The mayor, originally chosen by the common council, has been given an independent source of authority in popular election. Originally a magistrate, and in the main an exponent of municipal dignity, he has been given successive additions of power, until he is a real city potentate. Is this wise?

There can be little doubt that the root of the evils which confessedly afflict our civil life springs from politics, in the lowest sense of that elastic word. City offices are spoil for which politicians scramble; city contracts and franchises are at the same time the means of party cohesion and of individual enrichment. In efficiency, extravagance and corruption undoubtedly exist in the government of many cities. That these do not exist to anything like the extent commonly believed may readily be conceded. But the belief to the contrary is firmly rooted in the public mind and cannot be eradicated by mere argument—a fact almost as fatal to the popular support of public administration as if the belief were wholly correct. Public confidence is absolutely essential to the success of a democratic government.

Such confidence cannot be done in our cities by a mere change of men. There must be a radical and plainly apparent change of method as well.

The absurdity of the injection of national politics into municipal government is obvious. National questions have no more relation to the affairs of cities than to affairs in the moon. A city is a corporation whose purposes are the safety, convenience and comfort of its members. Police protection is to be provided, protection against fire and disease, adequate drainage, streets, lights, water, parks, schools. What have any of these to do with the question on which national parties divide?

The county is the unit of the state, and so of the nation. The county, then, is the national unit of national political organization. But there is no more logic in a Republican or Democratic city government than there is in a Republican or Democratic organization of a bank, or of a railroad company, or of a church, or of a social club. The two things, national politics and city government—have nothing in common. Their union is grotesque and preposterous.

Here lies the vice of the present system. The elective and omnipotent mayor is of sheer necessity a political officer. Whether elected by Republicans or by Democrats, or by a coalition of factions, in any event his choice is essentially political. It is a political campaign by which he is chosen, it is a political relation which he holds to his supporters. The city is stirred from center to circumference by the same kind of political excitement as that attending the choice of governor or of president. Once elected the mayor immediately becomes a political possibility for higher office. He looms up as a candidate for governor, senator or president. Cleveland and Hill were mayors. Seth Low is "mentioned" for political preferment. Mayor Harrison is not below the horizon of the higher politics.

The political mayoralty, then, of absolute necessity forces into the city the



thing which renders satisfactory city government impossible, and which it should be the aim of every effort to eliminate.

Further, the American mayoralty actually prevents the unity which it has been supposed to secure. We have patterned the government of cities on that of the states. The mayor is the governor. The council is the Legislature. There is a variety of checks and balances. There is autonomy of departments. The whole thing is modeled on politics rather than on business. But, after all, the place of final responsibility is not fixed. The mayor shifts the blame on the council and the council on the mayor. Our idea of safety seems to be to construct a governmental machine which is pretty sure not to go at all. Then we sink back contentedly with the thought that we have no need to be anxious about it or to give it much attention, as it is not likely to run off the track. In fact, we ought to keep an eye on it all the time.

Why not abolish the political mayoralty altogether, attempting to preserve separation between legislative and administrative departments, and vest the control of the city administration directly in the council?

Chicago's experience has shown that it is entirely possible to have a reliable council and one that is conducted independently of partisan politics. If the council really determines city policies and sees that they are carried out, all the more will voters be awake to the necessity of choosing proper aldermen.

It is easier to elect a satisfactory city council than it is to select a satisfactory mayor. Besides, independence of party is much easier in the choice of aldermen than in the choice of mayor.

An improved structure of the council on some such lines as recently suggested by a Chicago jurist would still further insure a sound council.

The mayor should be elected by the council and held responsible to that body. He should be an administrative

expert, not a politician, and should hold office by as permanent a tenure as the fire marshal or the superintendent of schools. He would then cease to be a political officer and would become a professional administrator of the city's business affairs.

As to the presidency of the council, there is no more reason for having that vested in the mayor than for vesting it in the county judge. The council can choose its own chairman.

Is such a scheme chimerical? It is substantially what is done in every great civilized nation except the United States. Throughout Europe city affairs are administered by the council, which is a non-political body. A member, once elected, is likely to be re-elected long as his service is satisfactory, without regard to his national party affiliations. The mayor is regularly appointed by the council. In Prussia and some other German states city administration is a profession, like engineering or medicine. A successful mayor is likely to be called to a similar place in a larger city, as with us happens in the case of a college president or superintendent of schools. A British mayor is little more than chairman of the council. The metropolis of London and the city of Paris have no mayor at all.

What, then, is the use of our American political mayoralty? If the tremendous effort to put forth to elect Mr. Low in New York has been devoted to choosing a trustworthy council, would not the results be more likely to be lasting than seems to be the case there at present? Would not policies take the place of individuals in the public eye; and hence have more chance of success? Is the political mayoralty the real remedy for difficulties in municipal government, and it is worth preserving?—Chicago Tribune, May 11, 1902.



## Public Ownership of Public Utilities is Bound to Come.

[SACRAMENTO BEE]

Many who prate so much about vested rights and who see in public ownership of public utilities a menace to the property of the citizen and a grasping of the property benefits conferred upon him by immemorial custom, if not law, would make a better effort to postpone the approach of the inevitable if they did not count among the vested rights many that might better be classified as accepted wrongs.

Nor should those who argue against the march of public ownership forget that, as the State gave, so can the State take unto itself again. That it would not without ample and even generous compensation goes without saying. That it has the right as well as the power, will not be contradicted by any student of the history of Nations, or any delver into the ethics of political economy. The public ownership of a great many public utilities would be for the best interest of the citizens as well as the State, is commencing to be acknowledged by many broadened minds who, twenty-five years ago, would have deemed such action confiscation, if not barbaric vandalism.

Many municipalities now own their own gas and water works. Some own both. And some own not only these public utilities, but the street car lines as well.

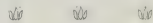
The time is not far distant when every progressive American city of any considerable population will own and manage for the benefit of the citizens all public libraries, free baths, local telephone systems, gas and water works, and other utilities of a general public nature. Several cities in Scotland and England have been doing that for years. Detroit has been trying the experiment, and a few more American cities are about to follow the example, and more are discussing the advisability.

It is as fruitless for capitalists and syndicates to denounce the inevitable

victory in this Nation of public ownership of many public utilities as it was for the slave owners to attempt to check the abolition of slavery. In God's own good time, it is sure to come. And it looks as though that time is not far distant.

For this, the people are undoubtedly much beholden to the Trusts. Those vast combinations of capital have shown what wonders can be accomplished in railroad management by methods of concentration. They have demonstrated that enormous profits can be made even on stocks outrageously inflated. They have given an object lesson to the people which it is well they should not neglect, but should study more and more. They have set it out almost in black and white that the government can run these railroads at a profit, and reduce the rates especially far freight, far below what is now charged.

Not only has the Railroad Trust furnished this object lesson to the people, but it has, at least in California, by its actions made the people anxious if not crazy for public ownership. The fruit growers of the Golden State, oppressed not only by heavy rates for shipping their fruit to the East, but also under the burdensome condition of having to allow the railroads to ship it by any route which they may see fit would hail Government ownership and management of the great transcontinental lines as enthusiastically as Constantine welcomed the Cross in the heavens.



## Progress Toward Public Accountability.

[PUBLIC POLICY.]

The question, "What are you going to do about it?" supposed to have been asked by an overbearing political boss, has been practically asked by every corporation speculator who has attempted—and many times succeeded—in winning unfair profits by methods that were of doubtful morality and legality. There is but one answer to this question. In the long run the people will



put a stop to the arrogance, to the possibility of making gains in ways that are an injury to the public welfare. When the people undertake to do this, if their action is guided by prejudice rather than by wisdom, its first effect is likely to be unnecessarily injurious to the interest attacked and to themselves. But they will persist in their effort, as they persisted in the effort to secure personal liberty, until it is accomplished. Much of so-called vicious legislation is the people's protest against abuses. It places the interest attacked on the defensive and forces it to acknowledge its accountability to the public. When this is done the public acquires a more accurate knowledge of conditions and is in position to be fair. There is no case on record where the public has knowingly been brutally unreasonable and vicious in dealing with any interest. The lesson to be learned is that the best safeguard for an interest is the record of open, honest, acknowledgment of its public accountability.



### Forming an Improvement Society.

IN FRANCIS COPLEY IN PARK AND CEMETERY.

We are in receipt of a large number of inquiries relating to the formation and management of improvement organizations, and feel that we can do no better service to those who need such advice than by outlining the methods of some successful existing organizations.

To begin with what is probably the oldest society in the country; the Laurel Hill Association of Stockbridge, Mass., was organized in 1853; adopted a constitution in 1863; amended it in 1878; and amended it further in 1896, at which time it prepared and published a little pamphlet containing its constitution, as amended, together with the following suggestions to new organizations:

1. Funds to a considerable amount

to serve as a nucleus for investment as well as for immediate use, should be secured before starting work.

2. Annual subscriptions should be obtained, and when practicable pledged for some years ahead, to insure the permanence of the organization and the continuance of its work.

3. Endeavors should be made to interest all classes. Children might be permitted to set trees themselves under the direction of the Association.

4. It is well to begin operations at some point in which the whole community is interested, such as the cemetery, or the public green or square. Avoid attempting to do too much at once.

5. To keep up the public interest in the Association and to look after its work, it is important to have monthly meetings of the executive committee. In small places these meetings are likely to be pleasanter at the residences of members than in a public hall.

6. In some states, as in Massachusetts and New York, a special statute is not needed for these organizations.

Many eastern improvement organizations deem it necessary, on account of bequests received and the expectation of further gifts, that their societies be incorporated, which accounts for paragraph six.

For instance, Miss Grace E. Blodgett, Secretary of the Village Improvement Society of Templeton, Mass., wrote us some time ago that in the fall of 1900 their society had a hotel given it, the "Templeton Inn," which, she stated is valued at about \$45,000. The society has full control of this property and has the privilege of leasing it if it sees fit to do so. The inn is utilized as a summer resort hotel. This interesting fact should certainly be an encouragement to all. Look around and consider who may in future donate ground for parks, squares, playgrounds, etc., to be under the control of your local improvement organization.

The Laurel Hill Association, and

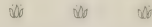
many other societies, own real estate which is, of course, conducted in the interests of the purposes for which such organizations are formed.

The officers of improvement societies consist of president, one or more vice-presidents, treasurer, secretary and, in some instances, of a corresponding secretary. These officials, together with the chairmen of standing committees, usually form the Executive Board, and this board comprises the active working force. In it, too, is usually vested the the practical control and management of the affairs of the society and the expenditure of all of its moneys.

The following simple constitution is that of a prominent organization and will serve the purposes of societies formed now as well as it did when first offered in 1899. Its very simplicity is, perhaps, its chief excellence.

1. This Association shall be called \_\_\_\_\_ Improvement Society.
2. The object of this Association shall be to cultivate public sentiment in favor of improving and beautifying the homes, streets and surroundings of \_\_\_\_\_ and to endeavor to promote, in every legitimate manner, the best development of the whole community.
3. The payment of \_\_\_\_\_ (any sum decided on, usually from 25 cents to \$2.00) shall constitute membership during the current year of the Association.
4. (Deals with the number and names of officers and the number and personnel of the Executive Board.)
5. No debt shall be contracted by the Executive Board beyond the amount of available means within their control, and no member of the Association shall be liable for any debt of the Association beyond the amount of his or her subscription.
6. (This section specifies the date of annual meetings; gives rules for called meetings or quorums.)
7. This constitution may be amended at any meeting of the Association,

provided said amendment shall have been in the published call of the meeting.



### Interesting Figures From a Town Report.

The Town of Santa Clara has just issued in pamphlet form its last annual report and in its pages some statistics are presented that command attention.

By way of preliminary explanation it may be said that Santa Clara has a population of 3,650. It has an assessment roll of \$1,400,000, in round numbers. Last year its tax levy for general municipal purposes was 35 cents on each \$100,—30 cents for the general fund and 5 cents for the sewer fund. This is an exceptionally low rate—the lowest of any town in the State.

The revenue produced from the levy was less than \$5000. The revenue from licenses was \$1,600, or a total revenue of \$6,600.

Notwithstanding this limited revenue from taxes and licenses the report shows the following expenditures: For street purposes, \$7050; for general administration, salaries, etc., \$2623; for sewers, \$317; for the fire department, \$856, a total of \$10,850. Besides the balance on hand in the general and sewer funds was \$3100 in excess of the balances on hand at the commencement of the fiscal year.

In other words the expenditures and balances on hand were \$7350 in excess of the ordinary revenue from licenses and taxes.

Where did this money come from?

An examination of the report will answer the question. The municipal water works returned a net profit, after paying operating expenses and interest on bonds of \$4,156.56 and the municipal gas works, returned a net profit after paying operating expenses and interest on the bonds, of \$2,298.10. This shows the financial gain to the taxpayers resulting from the municipal operation of its public utilities.



The report furthermore exhibits other interesting statistics concerning the operation of its utilities. Thus the electric lighting plant, for street purposes only, was operated at a cost of \$2.60 per lamp of 2000 c. p. per month. This does not include interest or depreciation. Lamp per hour the cost was less than 12 cents. This is a very low price for a small town to pay.

The actual cost of pumping water was 2 cents per 1000 gallons. This does not include interest or depreciation.

The cost of delivering gas to the consumer was 61 cents per 1000 cubic feet, not including interest or depreciation.

The cost of sprinkling streets, not including the cost of the water, was \$1400; the amount of water used was 21,000,000 gallons, and the actual cost of the same was about \$450. The length of streets sprinkled is not given, but from other sources it is learned that it was nearly 30 miles. This is an exceptionally low cost. This includes all of the streets of the town and they are sprinkled at all seasons of the year whenever dusty.

The report offers a good lesson in municipal management to those who would study it.

The report also contains the annual message of D. O. Druffel, president of the Board of Trustees, and contains suggestions of more than ordinary interest.

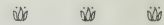


### Franchises--Competition--Taxation.

[PUBLIC POLICY.]

It takes a very long time for a sound economic proposition to displace a popular prejudice. A very long time ago someone said "competition is the life of business and monopolies are odious." Much of the present-day discussion of competition and monopoly gives one the impression that no one has done any independent original thinking on these subjects since the above quoted statements were made. Those who are in position to grant franchises for pub-

lic utilities are still discussing the subject in the vain hope of finding some way in which corporations can be induced to continually cut each other's throats for the benefit of their patrons by a war of competition. This is the condition they rely upon to induce corporations to make these public improvements, and thus increase the value of all land within their zone of influence. When the improvements are made these same public officials come forward with a proposal to tax the corporations for having increased land values by supplying facilities for the comfort and business advantages of the people. They have by diligent application discovered some fourteen different ways in which they can tax public service corporations. The persistency of this method of dealing with the public service problem is unaccountable. Only a superficial examination of the economic principals involved is necessary to show that this class of industries has no place in the competitive field, they are natural monopolies and should be so dealt with.



### Oiled Roads Are Successful.

"Oiling is a success when properly done." This is the testimony of Supervisor Shaver after experimenting on the roads of his district.

"Two strips of road were oiled," said Mr. Shaver, "two miles were oiled, between San Janito and Florida and two miles between Hemet and Florida. A part of the road was treated to two doses and a strip of very sandy road was given three treatments. The oil was put on hot, and a fine piece of road has been made. A White oil wagon was used and it proved well adapted to the work.

"Next week I shall take the wagon to Indio, and oil about three miles of road between Coachella and Indio. The melon picking, packing, and shipping operations make a good read necessary in this section."—Riverside Press.

## The Opportunity of a Mayor.

[THE MUNICIPALITY.]

In a recent speech Lord Roseberry gave an expression of a sentiment which has attracted great attention in Europe and the United States. After a varied experience in all departments of public life Lord Roseberry places himself on record as believing that there is no branch of the public service which offers so great an opportunity for the man who desires a public career than that offered by our cities. After serving in the council of London, and in the British parliament, he asserts with positiveness and vigor that it is in the government of our cities that the greatest opportunities are open to men who desire to go into public life. Coming from one who has served in so many official positions this opinion must be taken with great weight and consideration. Our state legislatures often convene only every two years while our city councils are in session throughout the year, meeting as often as one or two times a month and in some instances every week. In connection with city government the officer is in a position to render a constant service. He is solving concrete problems—problems in which we all have special interest. We believe that it can be said without fear of contradiction that there is a greater opportunity to deal constantly with real problems as a member of the city government of Milwaukee than in the legislature of Wisconsin; as a member of the city government of Greater New York, than as a member of the legislature at Albany.



## Village and Town Improvement.

[MIDLAND MUNICIPALITIES]

At the present time there is a growing interest among the municipalities of Iowa in the work and formation of village and town improvement societies. It was a favorite theory of Benjamin

Disraeli, that the moral and intellectual development of the citizen, was a more important factor in the formation of national character, than the enactment of a certain policy or the existence of a certain institution. The same principle applies with ever greater force to the development of a municipality. The truest test of a municipal success is not how large, but how good. The important thing is to educate the citizen to the highest possible conception of his duty to himself and his neighbors. If the citizen takes a pride in his own property and beautifies it to the greatest possible extent, it naturally follows that he takes an interest in all the ideas brought forward for the benefit of the municipality at large. Just in proportion as all the people take an interest in the development of their municipality just so far will the officials endeavor to go in their efforts for improvement. It is then plainly important that everything possible should be done to interest the great mass of citizens along the line of progress. For this work the improvement society is especially fitted. An active improvement society will do more to beautify a city and maintain it in a sanitary condition than will the existence of any number of ordinances, orders and efforts of officials unsupported by proper municipal spirit. If the administration desires that its efforts will result in a improvement of local conditions, it should use every possible means to interest the citizens in the municipal welfare, and the improvement society is the one great agency that will bring this condition about. Every municipality in Iowa should have such a society and with the proper assistance from the local officials the women of the municipality, who seemingly are always anxious to improve local conditions, will no doubt form such a society and the result will be most surprising. See if it is not possible to have such a society formed in your municipality while you are in office.



## Library Department

### Preservation of Local History.

[CONTRIBUTED.]

What is the favorite topic of Californians, native and adopted? California. Why? In the words of President Jordan, "The Californian loves his state because his state loves him, and he returns her love with a fierce affection that men of other regions are slow to understand."

Does this statement need to be explained to those who live beyond the Rockies? If so, let us first talk about California's climates—and we must now use the plural in describing atmospheric conditions. The scientists tell us that California has seven different and distinct kinds of climate.

#### SAN FRANCISCO CLIMATE.

Residents of San Francisco know that they have a climate of their own, unapproachable and unexcelled in this wide world—albeit a trifle chilly in its trade-winds of July and August—for where else can a great city be found possessing a mean temperature of 50° in the winter and of 55° in summer? Speaking frankly, the fogs and cold winds blowing over the city part of the year are a terror to weak-lunged people but, laden as they are with minute particles of iodine and chlorine, they are a constant tonic to the robust, in fact, proving almost hazardous to the newcomer who feels so strong that he is sure no vacation need ever exist for him.

#### SOUTHERN CALIFORNIA.

Of Southern California's climate, especially in winter and spring months, what words can describe the warm and genial, though not enervating, temperatures of that region? Imagine an easterner, worn with labor and confinement

in a rigorous climate, coming to this balmy country where to stay indoors is a hardship and to live outside is a delight. He may enter the secluded Ojai valley at its 1000-foot elevation, linger on the charming shores of Santa Barbara or Coronado, or overlook the superbly beautiful San Gabriel valley and then perhaps re-echo the recent inquiry of an editor in the central west: "Do you know that we look upon California as an anticipating heaven?"

#### OTHER PARTS OF THE STATE.

While the atmospheres in the eastern states are in summer months surcharged with oppressive humidity, the valley and the mountain sides of California receive a constant baptism of hot, dry air. In the middle of the day this heat may be severe, but it is not dangerous and sunstrokes are unknown. The nights are uniformly cool; blankets are a necessity. We may not longer dwell on this fascinating subject but pass on to speak of

#### THE SCENERY OF CALIFORNIA.

Says our esteemed naturalist, John Muir, in his volume on "The Mountains of California,"—"Go where you may within the bounds of California, mountains are ever in sight, charming and glorifying every landscape." Think, you will, of the Sierras, five hundred miles long, seventy miles wide, with height varying from 7000 to 15,000 feet with eternal snows resting on the loftiest peaks. Then there is the Coast

Conjure up also the sight of old Ocean's shore, with tumultuous surges beating on the sands, or on the bold, wierd, headlands of more than a thousand miles of coast extent.

Imagine, if you please, what it means to the thousands on thousands of campers who yearly pitch their tents, or make the stars their canopy, with the sight of the sounding sea, the dashing brook, or in the stillness of the mountain side. No rain, no moisture; nature keeps here an open house to all her children.

Range hundreds of miles in length with spurs running in various directions, in close and intersecting neighborhood to many of the cities in the state.

Think again of vast redwood forests of impressive height and most dense shade.

Stand on Mt. Lowe, Loma Prieta, or Diablo, and see the vast expanse of vineyards, orchards of fruit, fields of grain and alfalfa, great forests and sunlit valleys, visit Shasta, King's River Canyon and the Yosemite and then you will cry aloud,—“There is but one California,” and perchance, may recall the words of Bryant as most appropriate for the Sunset State:

“To him who in the love of Nature  
Holds communion with her visible  
forms,  
She speaks in various language.”

#### MORAL RESPONSIBILITY.

But we must part with this engaging topic or we shall fail of reaching the subject announced in our heading.

There is a good old book, not unknown to any of our readers, which among its teachings lays stress upon idea of individual responsibility. “Of him to whom much hath been given much will be required.” This idea has world-wide acceptance, not even excepting the most favored regions, so we may, without further question, say that as much has been given to the Californian, it is certain that much will be required of him. Hence duty, as well as affection prompt to the highest services for our state. Our discussion will, however, to-day cover but a single phase of accountability and that will be on the important duty of preserving all available records of local history.

#### CERTAIN GROWTH

It is superfluous to enlarge upon the thrilling and adventurous development of California; it is sufficient to observe that the record of no other state can be compared to it. Unusual influences will continue to work in its usual expansion. Its mixed population, its

diversified industries, its scenic attractions, and, not least of all, its outlook on the Orient, will all combine to produce a wonderfully original, rich life of its own. Then we must take into our thoughts the certainty that California will not long have in her vast area the paltry population of but a million and a half. The causes that are working for a change are even now operating before our open vision. The million and one-half will, in the not distant future, be three millions, five millions and yet more.

Three generations ago Henry Clay, halting on the headquarters of the Ohio, knelt close to the ground, looked out on the grand scene before him, requested his companions to leave him there for a while, “listening to the tread of millions to follow.”

#### DUTY OF PUBLIC LIBRARIES.

So far as is generally known, no concerted attempt has been made to gather from all sources the records of local history of our towns and counties. Is it not time that this indifference ceased and the easy-going, neglectful ways gave place to those of interest and glad pride in our history? We are of those who believe that Californians will heartily respond to such a call when its importance to present and future generations is realized by them.

To the query, where shall such material be kept for the benefit of its town, there is but one reply—in the public library. “But we have no library.” Then agitate and organize for one. Examine the general library law (approved March 23, 1901) and note how easily your city may provide itself with one. “But our town is not incorporated.” Then agitate for that first. See if your community is not tired of staying out in the cold and depending solely on county authority. Test the question whether your citizens are willing to go longer without that best of all institutions for the whole community—the free library. But, “We have a li-



brary, what is the first step?" Begin at once. If you are a librarian, set aside the first old volume, pamphlet, or leaflet that you can find which deals with your local surroundings. Then tell the public through your local papers what you have begun to collect and that you want one or more copies of all old addresses, memorial sermons, programs of concerts and entertainments, year-books, catalogues, reports of trustees, supervisors, church and lodge documents,—everything in fact of local literature that has entered into and become a part of the history of your place. Many of these may now seem common-place to you but hereafter they will prove of priceless value. If extra copies of rare pamphlets and books come in, it will be a good idea to accept them and offer them to the library of the State University and to the State Library. Do you know that the University Library at Berkeley has for years been accumulating California? Every pamphlet and book written on California, or written by a California author on any subject, that is not in possession of this library will be gratefully acknowledged by its librarian.

#### THOMASON TRACTS.

Let us look into the British Museum for an hour and examine the collection known as the Thomason Tracts. This consists of some 30,000 leaflets, broadsides, circulars, addresses, pamphlets, etc., gathered and labeled by one Thomason, a London bookseller, in the middle of the seventh century. Can one imagine the value of these waifs of 250 years ago? Think what insight they give of the local coloring of London's life at that period, what wealth of material for the author and historian!

#### NEWSPAPER FILES.

Another method of preserving local history is by filing, and if possible binding, the daily or weekly paper of one's own city.

The newspaper is a mirror of events

for the day or week; nothing else compared to it. To preserve such a record for future use is of the highest importance. Would you know what was going on in San Francisco in its early years? Open the volumes of the *Alta California* in the San Francisco public library (one of the few practically complete ones in existence) and note the records of the courts, the days of sailing of the mail steamers, the opening of new mines, the proceedings of the vigilance committees; all of those are before you as fresh as though printed yesterday.

All of the large libraries in the country bind more or less of daily and weekly issues of newspapers.

Sometimes it is urged in the smaller cities that they have no need to do so because their newspaper offices preserve files to which the public have access. Granting the fact of such keeping, does it follow that because some persons own private libraries that there should be no public libraries? Has not the public a right to demand that they can examine at their own time and convenience a history which may contain knowledge of supreme value to them?

Again, it is alleged by the small libraries that they do not preserve a file of newspapers because they cannot afford the expense of binding. This is the sorriest excuse of all. With an awl, bit of copper wire and brown paper covers any person can in a few minutes make a file suitable for all practical purposes.

There is not a librarian in the land who would not feel affronted by the mere suggestion that purchases of works on ancient, mediaeval and modern history for the library should cease. Why then should not the collection of all that bears upon and illustrates the life and growth of his home interests receive the most considerate and persevering attention?

## Features of the New Library Law.

Some misunderstanding of the provisions of the general library law seems to have arisen in several cities, hence a brief explanation of them may now be timely.

The fundamental features of the law are:

*First*—That the legislative body of each incorporated city not possessing a free public library *shall*, on petition of 25% of the legal voters, establish and maintain one; said legislative authority being allowed to levy any amount it deems best for library purposes for, and during, two years from March 23, 1901; subsequently, cities of the 1st, 2d and 3d classes may levy not to exceed one mill, and cities of the 4th, 5th and 6th classes not to exceed two mills on the dollar, annually, this levy being in addition and other taxes permitted. These provisions apply to all incorporated towns and cities in the state, with the single exception of those whose charter provisions on this subject may conflict with the general law.

*Second*—All administrative duties, including the purchasing of real estate and erection of buildings, are to be performed by a board of library trustees, who are to be appointed by the Mayor or executive head of the city.

Sections 5 and 8 fully describe these duties.

In brief, the legislative power of a city is authorized to establish and maintain a public library; the board of library trustees is clothed with full and ample powers for its management.

This new statute is founded on long experience of our own and other states, and the drafting of its various provisions received the most careful attention of the judiciary committee of the League of Municipalities before it was presented for action to the Legislature.

## Brief Library Notes.

Redding and Anaheim have each established a public library under the provisions of the new library law.

Santa Ana has received the specifications and detail plans for its new Carnegie Library.

Santa Rosa has selected a site for its new Carnegie Library on the corner of Fourth and E streets.

Pomona has accepted plans for its new Carnegie Library, and the new building will be a very handsome one.

The contract for the construction of Fresno's new Carnegie Library has been awarded to A. M. Jones for \$26,413.

The contract for the Carnegie building at Los Gatos has been let for the sum of \$9,300.

Oakland's new library building will be formally dedicated on June 30.

## New Method to Determine Speed of Cars.

A unique method has been adopted by the Council of Mianisburg, O., to determine the speed of the electric cars on its streets. The city ordinance places the maximum rate of speed at six miles per hour and it is stated that a man, who can walk at that rate, has been engaged to keep watch on the cars. He walks along the track and, if he cannot keep up with any car, he reports the fact to the Council, which takes up the matter with the railroad company.

## Oiling Specifications.

Specifications for work of oiling streets in Santa Barbara have been adopted. They stipulated thorough grading of the streets, the loosening, after grading, of the surface to a depth of four inches, oiling with 100 barrels of oil, tamping with an implement especially made for the purpose and resembling a roller made of very large railroad spikes driven into a cylinder of wood and a final rolling to harden the surface. All filling of earth necessary to secure a perfect grade will be done by the city.



### Against Licenses.

[REDLANDS CITROGRAPH.]

Business licenses ought to be abolished. The business man is the target of all sorts of grafters for causes that are good, bad and indifferent. He cheerfully contributes to scores of enterprises that are good. He helps some causes that are decidedly indifferent through fear of omitting some that are worthy. He now and then refuses to contribute to one that is a fake on the face of it. He has to meet heavy expenses and keen competition. These city licenses on business appear to him to be directed against him, like all the rest of these minor taxes, simply because he is easily reached and can't run away. He regards them as an imposition. They are an imposition. *The Citrograph* has been on record for a long time as squarely opposed to the business license system, on principle.



### For Civic Beauty.

It may be well to take something more than a passive interest in the movements to increase the comfort and beauty of public places and private homes that are taking place now in other cities.

Shade is a feature so essential to a Fresno home that much attention has been given by all but the most backward home-makers to the planting of trees. The value of a fine residence property largely lies in its shade trees. Too often, however, no attention has been given to the variety as regards quickness of growth, life of tree, abundance of shade, cleanliness of growth and beauty of appearance.

In the city of Stockton, strong public interest has been aroused in the formation of an arbor club. It starts out with 500 members, including men and women, and contemplates enlisting the school children in the movement. Its purpose is not merely to plant trees in

public places and in the grounds of members, but to educate all the property owners of the city to the necessity of ornamenting grounds and avenue with trees, shrubbery and flowers.

A public improvement club in the south has the following good program to guide the endeavors of its members.

1. Planning the appearance of the city as a whole; planning and placing of public buildings; arrangement of streets; location of parks and monuments; planting of street trees, and so on.

2. Cleanliness and health.

3. To secure highest attractiveness from artistic effects.

4. To do away with unsightly places, buildings and back yards.

5. To preserve natural beauty and historic places.

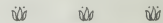
6. To do away with objectionable advertisements, plan for appropriate placing and methods of legitimate advertising.

7. To beautify sidewalks, street car and railway routes.

8. To provide public seats and resting places.

9. To secure the use of the best literature on outdoor art, issue circulars, provide press reports.

10. To supply seeds and cuttings.



### Personal.

J. O. Cadman has been appointed Councilman of Oakland in place of C. A. Bon, deceased.

P. G. Scadden has been appointed Trustee of Nevada City in place of Joseph Eustis, resigned.

Paul M. Gregg has been appointed City Attorney of San Luis Obispo.

L. J. Chrisler has been appointed Marshal of Suisun, vice D. C. McDonald, deceased.

H. A. Wood received a majority of the votes cast at a recent election for Clerk of Corona, the April election having resulted in a tie.

Geo. H. Woodruff has been appointed trustee of Whittier.

A. R. Bogue has been appointed city attorney of Stockton in place of Gus G. Grant, resigned.

## What the Cities are Doing

There is talk of the incorporation of Oxnard.

San Mateo has purchased a fire alarm system for \$570.

Benecia has organized a Women's Improvement Club.

Pasadena is considering the establishment of a "Juvenile Court."

Anaheim has passed an ordinance prohibiting all forms of gambling.

San Mateo has awarded bridge contracts amounting to \$24,293.

Riverside has concluded not to have a Freeholder's Charter this year.

Napa has let a contract for the construction of a bridge to cost \$4,228.70.

Selma consumes 100 pounds of ice daily in its public drinking fountain.

Palo Alto is considering extensive improvements to its water works system.

Sebastopol has just incorporated making 123 municipalities in the state.

On July 15th Petaluma will vote on the question issuing \$35,000 for a school building.

Corona citizens have petitioned the trustees to establish a municipal electric lighting plant.

Long Beach has installed its new fire department and feels secured against devastation by fire.

Rio Vista has purchased the necessary material for the construction of its water works system.

Anaheim, Paso Robles, Marysville, Los Gatos, and Modesto have increased the rate of saloon licenses.

Salinas has completed a census which shows a population of 3900—an increase of over 500 from the census of 1900.

The new municipal water and light works at Lemoore are nearly completed. C. A. Watson has been engaged as engineer.

The annual message of Mayor Chesbro of Gilroy recommends the construction of a city hall and the purchase of the local gas plant.

Long Beach has purchased a tract of water-bearing land for \$1800, with a view of some time in the future using as a source of water supply.

Whittier has just contracted for the covering of its water reservoir at a cost of \$1300; the

the town also contemplates establishing a fire department.

Sacramento will hold bond elections as follows, For High School, July 22; for sewer system, July 23; for water mains, July 24; for city hall, July 25.

Berkeley has granted a franchise to the Santa Fe on condition that it establishes a suitable depot and stop its passenger trains thereat at least twice daily.

Emeryville has awarded a contract for two miles of street macadam. The specifications call for a finish of crude oil at the rate of one gallon per square yard.

The trustees of the city of San Bernardino, together with a number of prominent citizens, are earnestly at the task of finding an abundant water supply for that city.

Redondo is contemplating extensive street improvements and may have recourse to a bond issue for that purpose, a former bond issue having been declared illegal.

Sonora recently let a contract for the completion of its last section of sewer to cost \$1300. The system has been put in without issuing bonds which is as commendable as it is unusual.

Marysville has adopted an ordinance limiting the speed of automobiles in the business part of the city to twelve miles an hour except at crossings which shall not exceed eight miles an hour.

Pasadena has completed the purchase of lots for its new city hall and has called for competitive plans for the structure which will cover a ground space of 80x80 feet and be two stories in height.

Sacramento will purchase an electric lighting outfit wherewith to light the water works building and city hall, and thus have a municipal lighting plant on a small scale. The city now pays nearly \$1000 a year for this service.

A committee of Sacramento officials have been visiting the mountains in search of a supply of clean water. The American river is being considered in this connection. There is every prospect that a proper supply will be secured within the next few months.

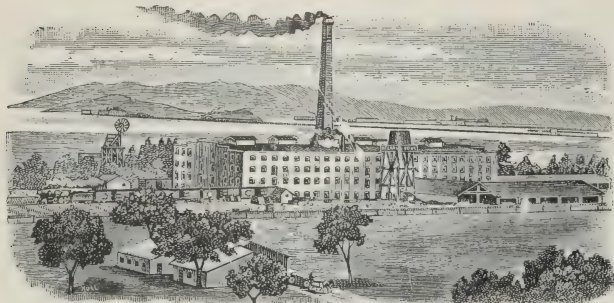
September 17th a special bond election will be held to submit to the voters of Los Angeles the proposition of incurring a bonded indebtedness of \$2,180,000, for public improvements. The money is to be used as follows: Four hundred and eighty thousand dollars for the purpose of acquiring additional lands and constructing additional buildings for the use of public schools; \$200,000 for the purchase of constructing a Polytechnic high school; \$1,000,000 for the purpose of constructing an outfall sewer to the ocean; \$400,000 for the purpose of constructing a system of storm sewers and \$100,000 for constructing certain sewers.



TELEPHONE MAIN 771.

INCORPORATED JAN. 11, 188

# N. CLARK and SONS,



WORKS AT ALAMEDA

MANUFACTURERS OF

Sewer Pipe, Chimney Pipe  
Caps & Tops, Architectural  
Terra Cotta, Hollow Tile Fire  
Proofing, Pressed Brick, Fire  
Brick, Tile, etc.

Office 17 & 19 Spear St.

San Francisco.

TELEPHONE SOUTH, 90.

## STEIGER TERRA COTTA & POTTERY WORKS.

MANUFACTURERS OF  
HOLLOW TILE FIRE PROOFING,  
SALT GLAZED SEWER PIPE, PRESSED BRICK.

ARCHITECTURAL TERRA COTTA,  
HOLLOW BRICK, PAVING BRICK, DRAIN TILE,  
CHIMNEY PIPE & TOPS, FLOWER POTS ETC.

FIRE BRICK

W E DENNISON,  
PRESIDENT  
J. W. McDONALD, JR.  
SECRETARY  
L. A. STEIGER,  
MANAGER

Office and Yard: 1556 To 1564 MARKET ST.  
and 127 To 131 CITY HALL AVENUE.

Works  
SOUTH SAN FRANCISCO  
SAN MATEO CO.

SAN FRANCISCO, CAL.

J. P. K. OTIS,  
President & Manager.

EDW. P. KING,  
Treasurer & Supt.

UNION WATER METER CO.

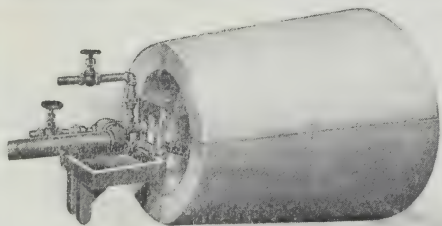
WATER

Worcester, Mass.

METERS

Union Rotary Piston and Columbia Patterns

Pacific Coast Agent: G. FRANK OTIS, 440 So. Los Robles Ave., Pasadena, Cal.



## BURN OIL

A new system. Perfect combustion.  
Highest Evaporation.

Write for Particulars and Tests.

Send us data of your present performance  
and get our guarantee of saving or pro-  
posal to install our system for the saving-

Tracy Engineering Co.,

151 Fremont St., San Francisco

# CALIFORNIA MUNICIPALITIES

VOL. 7.

DECEMBER, 1902.

No. 5.



A ROW OF PEPPER TREES.

## IN THIS NUMBER

Proceedings of the Fifth Annual Convention

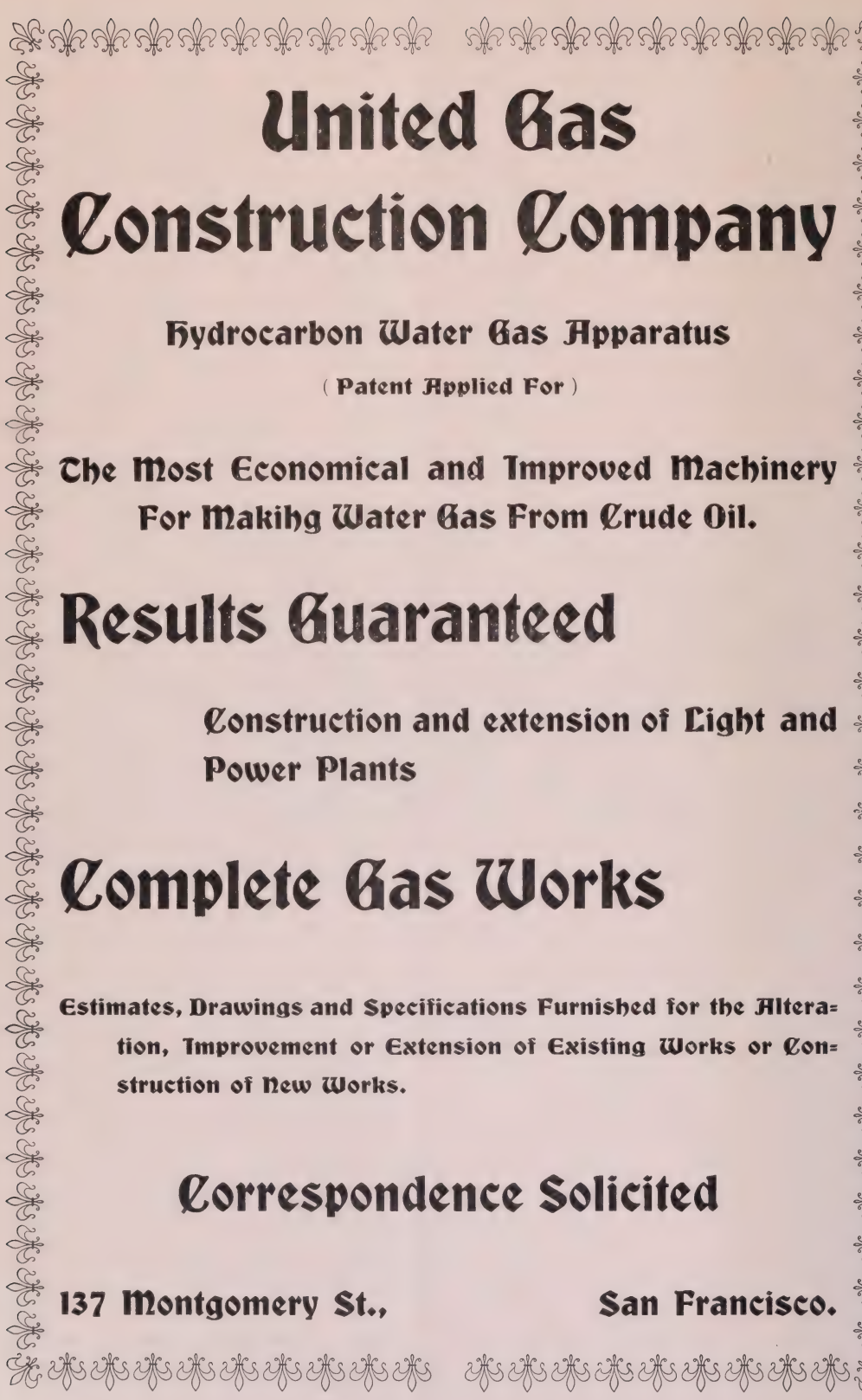
League of California Municipalities

SAN FRANCISCO OFFICE . . . . .  
ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.





# **United Gas Construction Company**

**Hydrocarbon Water Gas Apparatus**

**( Patent Applied For )**

**The Most Economical and Improved Machinery  
For Making Water Gas From Crude Oil.**

**Results Guaranteed**

**Construction and extension of Light and  
Power Plants**

**Complete Gas Works**

**Estimates, Drawings and Specifications Furnished for the Altera-  
tion, Improvement or Extension of Existing Works or Con-  
struction of New Works.**

**Correspondence Solicited**

**137 Montgomery St.,**

**San Francisco.**

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 7. December, 1902. No. 5

## California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor.

Office of Publication, - SANTA CLARA, CAL,  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

All persons interested in the study of municipal problems, members of local improvement clubs and other civic organizations, ought to be subscribers to this magazine. It is the only publication of the kind on the Pacific Coast.  
Send for sample copy.

### CONTENTS.

#### EDITORIAL:

Convention Notes.....	I.....131
The Interesting Features.....	132
PROCEEDINGS OF THE FIFTH AN-	
NUAL CONVENTION.....133	
List of Delegates—Address of Welcome..	133
Response by the President .....	134
Annual Report of Secretary .....	135
The Use of Oil on City Streets.....	137
Legislative Measures .....	153
Municipal Accounting, Reports and Statistics .....	154
General Discussion .....	157
The Disposal of Garbage.....	170
Construction and Repair of Streets—Concluding Proceedings.....	171
What the Cities are Doing—Newly Elected Officers .....	173

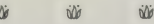
May the new year be a prosperous one with the municipalities.



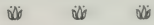
The Fifth Annual Convention was an unqualified success.



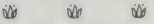
The reports of the convention as published in the San Jose papers were detailed and accurate. It was the best press reports that any convention has ever received.



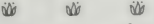
The municipal works at Santa Clara attracted attention. "It is the most complete, compact and convenient set of municipal works that I have ever seen," was the remark of one delegate.



Judging from the number of bond issues under consideration by the municipalities of the state, it would seem as though some public improvements would result during the year.



The intense interest manifested by the delegates in all matters before the convention was commented on as being significant of a desire to profit by the discussions.



"I wouldn't have missed attending this convention for fifty dollars," was the enthusiastic exclamation of a delegate.



**The Interesting Features.** It is difficult to say which subject brought before the convention was received with the greatest degree of interest. Everything that was brought forward, from the opening address of Mayor Worswick, wherein he appealed for a non-partisan conduct of municipal affairs, to the closing paper of Washington Dodge on the assessment of franchises, evoked an interest that was sympathetic and earnest.

The experiences of cities using oil on streets required half a day for their expression and many valuable facts were brought out.

The subject of uniform municipal reports was recognized as a thing greatly to be desired. The resolution adopted on this subject commits the League to an important work and is sufficient to keep the secretary's time pretty well occupied during the next year.

The iniquities of the present law disposing of franchises were pretty thoroughly exposed.

The necessity for a law permitting the use of ballot machines by local authorities was recognized.

The fact that very few California cities recognize political parties at all in their municipal elections was brought out during the proceedings and was received with some looks of surprise and gratification.

Nearly all of the delegates thought that the appointment instead of the election of a town marshal would be conducive of a better enforcement of local laws.

The law limiting the length of time for which lighting contracts could be made was recommended for repeal.

The talk of Keegan, of Santa Rosa, on Septic Tanks was listened to with deep interest, and it is reported that he has had offers of a lecture engagement as a result of the impression that he made.

Nor was this all. There were short

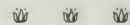
discussions on a variety of subjects—saloon licenses, garbage disposal, street laws, municipal ownership, telephone franchises, all of which were interesting. How Mayor Stevens of Fresno broke the fire hose combination was received with an expression of deep pleasure.

And as important as anything was the report of progress made by the municipalities during the past year. After listening to the various reports of improvements made each delegate seemed to feel that it was his duty to go home and strive to do so much work during the coming year that he could come to the next convention and report more improvements than ever before. Thus a spirit of friendly rivalry was instituted that will be productive of good.

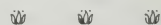
In conclusion, every delegate felt that the League of California Municipalities was an institution worthy to be supported.



The excursion to Alum Rock Park was a very pleasant diversion and the delegates were profuse in their praise of the natural beauties of the place, and San Jose was congratulated upon its possession of such a recreation ground.



Santa Clara's officials and citizens "did the grand" in providing a banquet. The delegates were told to come over and fill up on prunes, and hence when they were placed at a banquet table with an elaborate menu, they were somewhat taken aback. As the trip to Alum Rock Park had furnished them with a good appetite, full justice was done to the viands, and the guests took their departure with thanks for Santa Clara.



More cities were represented at the San Jose meeting than at any previous convention.

## — PROCEEDINGS OF THE —

**Fifth Annual Convention**

## — OF THE —

**LEAGUE OF CALIFORNIA MUNICIPALITIES.**

The fifth annual convention of the League of California Municipalities was held at the Council Chambers, City Hall, San Jose, December 10, 11 and 12, 1902. The following is a list of registered delegates:

AUBURN: Trustee, W. J. Morgan.  
 BAKERSFIELD: Clerk, A. T. Lightner.  
 BERKELEY: Clerk, Charles E. Thomas.  
 CALISTOGA: Trustee, C. W. Armstrong.  
 CHICO: Trustees, O. L. Clark and E. E. Canfield, and City Attorney, G. R. Kennedy.  
 FRESNO: Mayor, L. O. Stephens.  
 LIVERMORE: Trustees, J. F. Meyer, T. E. Knox and Max Berlin, and Clerk, W. H. Wright.  
 LOS ANGELES: Mayor, M. P. Snyder, Police Commissioner, J. A. Keeney.  
 LOS GATOS: City Attorney, R. F. Robertson.  
 MERCED: Trustee, W. H. Turner.  
 MODESTO: Trustee, W. J. Broughton.  
 MOUNTAIN VIEW: Trustees, B. E. Burns and George Swall, George Pattburg and D. B. Frink.  
 NEVADA CITY: Trustees, Dr. C. W. Chapman and Sidney Peard.  
 OAKLAND: Librarian, Charles S. Green.  
 PACIFIC GROVE: Trustees, E. C. Smith and B. A. Eardley.  
 PALO ALTO: Trustee, C. D. Marx.  
 PASO ROBLES: Trustees, T. Brooks and W. O. Dresser.  
 PETALUMA: Trustee, J. Nisson, and Street Supt., E. S. Shafer.  
 REDLANDS: Trustee, William Fowler.  
 REDWOOD: City Attorney, A. Kincaid.  
 RIVERSIDE: Trustees, J. L. MacFarland and J. W. Covert.  
 SAN DIEGO: Mayor, Frank P. Frary.  
 SAN FRANCISCO: Assessor, Washington Dodge.  
 SAN JOSE: Mayor, George D. Worswick, Councilmen, H. D. Matthews, A. L. Hubbard, J. J. Cherry, D. A. Porter; J. A. Belloli, Clerk; C. H. Peiper, Engineer, and City Attorney, F. B. Brown.  
 SAN LEANDRO: Trustees, J. O. Lynch and J. E. Quinn and Attorney, J. N. Frank.  
 SANTA ANA: Trustee, Frank Ey and Clerk, Ed Tedford.

SANTA BARBARA: Mayor, G. S. Edwards and Clerk, Alfred Davis.  
 SANTA CRUZ: Mayor, D. C. Clark and Councilmen, Frank Roberts and J. B. Maher.  
 SANTA ROSA: Councilmen, J. W. Keegan and C. D. Johnson.  
 SANTA CLARA: Trustees, D. O. Druffel, Dr. A. E. Osborne, J. M. Kimberlen, J. C. McPherson, J. J. Eberhard, and Clerk, G. J. Fenton.  
 SAUSALITO: Trustee, H. J. Crumpton.  
 SONORA: Trustee, N. L. Knudson.  
 ST. HELENA: Trustee, B. Bruck.  
 STOCKTON: Mayor, George E. Catts.  
 SUISUN: City Engineer, E. N. Eager.  
 SAN MATEO: City Attorney, C. N. Kirkbride.  
 VACAVILLE: Trustee, D. K. Corn.  
 VENTURA: Trustee, J. S. Collins.  
 VISALIA: City Engineer, L. E. MacCabe.  
 WATSONVILLE: Trustees, W. A. Trafton and J. I. King.  
 WINTERS: Trustee, F. M. Wyatt.  
 YREKA: Trustee, J. E. Turner.

President Snyder called the League to order at 10 o'clock A. M., and introduced Mayor Worswick of San Jose.

ADDRESS OF WELCOME, BY MAYOR  
WORSWICK.

Mr. President, and Gentlemen of the League of California Municipalities. It is with a very great deal of pleasure that I extend to you, in behalf of the City of San Jose, not only her warm welcome, but a wish that our convention may result in large benefit to every community in California. Your purpose in meeting is not only the free interchange of opinion as to experiences had, but as well to effect the best administration of local government. And these purposes, concerning as they do, the best there is in citizenship, are lofty ones.

There is yet much to be accomplished in California along these lines. I know



it is so with us in San Jose, and I feel that you can all of you say the same.

If I could utter but one sentiment in connection with your work, if, by a single stroke of pen or hand, I could accomplish but one thing, I would wipe out forever the curse of partisan politics in our little city and county family affairs, and I should do it with inexpressible pleasure (Applause). We want a citizenship that cares not a particle for political parties, when the government of the community is at stake. But, my friends, this is a broad question, and one which it is not my part at this time to discuss. I have high hopes of the future of our California municipalities. As they become perfected, we shall have a loyal people and a patriotic people, loving their State for its virtues and for its freedom from the selfishness and corruption which so frequently mar the community life of town and city.

I trust that you will all enjoy your visit to San Jose. Remember that the beautiful valley is not merely the pride of San Joseans, but the joy and the glory of the whole State. Drive through it before you return to your homes, and if, after you have seen it and its luxuriant houses dotting the roads to the very foothills beyond Los Gatos, you can say with us that it is the fairest State in the Union, I shall be very much gratified.

Again, Gentlemen of the Convention, I bid you, in the name of San Jose, a warm welcome.

#### RESPONSE BY PRESIDENT SNYDER.

Mr. Mayor, and Gentlemen of the Convention: We have convened here to consider and discuss questions that are of great importance. We are all earnest in our endeavors to have this convention fruitful to the municipalities of California in the direction of giving them a better government. But first, it is fitting that your President, on behalf of each and every delegate to this convention, should respond to the words of welcome of the Mayor of San Jose. We

have been received by the people of San Jose in a manner that calls for our very cordial appreciation, and I am sure that we all feel that it is due. We thank you, Mayor Worswick, for your words of greeting. We thank the people whom you represent for inviting us to meet in your city. San Jose is indeed one of California's fairest cities. She is surrounded with miles of fertile lands that have produced orchards from which thousands of tons of fruit are annually gathered. But more than all of its beautiful setting, my friends, it has a kind and generous people, a people that I have found to be as good as their surroundings. I can only trust, Mr. Mayor, that you will truthfully read our hearts upon this occasion, for there you will see the message, "San Jose is a royal entertainer; we are glad to be within your borders."

Gentlemen of the Convention, as I said in opening, the problems we have met to consider are of importance to the municipalities of the State of California. The character of every individual is molded in the atmosphere in which he lives. In this age the majority of our people dwell in the cities. It is therefore necessary, in order that our people be well governed, that our municipalities have the very best men at the head of their municipal governments. I was impressed with Mayor Worswick's statement that it was not a question of politics, but is a family affair, as to who we shall have to guide the reins of government. I want to emphasize that sentiment, my friends, and to say that I hope you will take it home with you, and that it may become a popular idea throughout our State. In the true sense of the word, every tax-payer is a stockholder in his municipal corporation, and when it comes to the selection of officers every two or four years, it is merely a question of selecting the best man to fill the positions, if it be looked at rightly. In a private corporation, it matters not what the politics of the employe

may be. Why should it be different in the case of municipalities? In a well-governed city, good citizens are reared, men who are strong men morally and physically. In a poorly ruled city, you have just the reverse; men are untrue, traitors to themselves, and to their homes.

The chief object that we have in gathering in convention here is to elevate the tone of the municipal government, and by so doing, to make our citizens better, and not only that, but to wipe out that arch enemy of all good government, corruption. Let us be diligent in our work in all of its lines. Let us take up the subjects that are so near to our hearts and consider them thoroughly. It may be that when this League meets in convention a year hence, many who are present to-day will not be occupying public positions. But, my friends, when the people chose you to represent them in their city affairs, you took the oath to serve them, and I believe you will serve them just as faithfully though your term of office be nearly expired. It is a duty we owe to the people, a duty that each owes to his constituency, to contribute to and get from this convention everything that can be given or taken for the general good.

The first business in order is the report of the Secretary.

#### ANNUAL REPORT OF SECRETARY

To the Officers and Members of the League of California Municipalities:

As Secretary of this organization, I beg leave to submit my Fourth Annual Report as follows:

#### GROWTH OF THE LEAGUE.

The League has made a very satisfactory increase in membership during the year. At the time of rendering my last annual report, the membership was seventy-three. During the past twelve months the following municipalities have become members: Fort Jones,

Calistoga, Whittier, Etna, Ferndale, Elsinore, Benicia, Santa Paula, Lakeport, Sonora, Ventura, South Pasadena, Sebastopol and Mountain View, a total of fourteen. One city (Salinas) withdrew from the League, assigning no reason therefor. The net gain was thirteen, making the present membership eighty-six. The growth of membership during the term of existence has been as follows: First year, twenty-nine; second year, forty-eight; third year, sixty-four; fourth year, seventy-three; fifth year, eighty-six.

As over two-thirds of the cities and towns of the State are now affiliated, the growth henceforth must be slower.

#### THE WORK OF THE LEAGUE.

During the past year the energies of the League have been directed largely to the conducting of a campaign of education in connection with certain constitutional amendments. At the last convention of the League, the League directed the Executive Committee to conduct a campaign for the purpose of defeating Assembly Constitutional Amendment No. 28, and also in favor of Senate Constitutional Amendment No. 3. Work in this line commenced in April and lasted until November. A total of 305,500 circulars bearing upon these amendments were issued by the Secretary's office. The result was eminently satisfactory. Amendment No. 28 was defeated by 87,000 majority, and No. 3 was adopted by 8,400 majority. As the latter amendment was defeated by over 17,000 votes two years ago, the result of a little effort in educating the voters is apparent. In this campaign the League was assisted materially by the San Francisco Board of Supervisors, which appropriated \$500 for expenses, by the newspapers of the State, which spoke emphatically on the matters at issue, and by the city and county officials who adopted resolutions calling the attention of the voters to the features of the measures before them.



The Secretary, during the year, has attempted to gather some statistics concerning municipal matters, with fairly satisfactory results. The rates of saloon licenses were obtained from about one hundred cities and towns, and the amounts of assessment rolls and tax rates were obtained from about ninety cities and towns. I hope to do more in this line next year, should I continue in the present official position.

A great many applications for information were received during the past year, most of them coming from city officials, though not a few were from private individuals. In most cases, I believe the information given was satisfactory. This department of service is increasing in efficiency, as experience is gained, and the applications will doubtless increase year by year. In this connection, the need of a library of municipal literature is urgently felt. I believe that an appropriation for books can be made during the coming year and a library established. It might be deemed advisable to make this library a circulating one for the officials connected with the League. I believe this would be popular and prove a great benefit.

Other suggestions pertaining to the welfare of the League I will take the liberty of offering at opportune times during the convention.

#### FINANCIAL STATEMENT.

The finances of the League have improved during the past year and are in a healthy condition as will be seen by the following report.

#### RECEIPTS.

1901

Dec.	By balance cash on hand.....	\$15 62
	“ cash from Pomona.....	30 00
	“ “ “ Santa Barbara.....	30 00
	“ “ “ Berkeley.....	40 00

1902

Jan.	“ “ “ Grass Valley.....	30 00
	“ “ “ Red Bluff.....	20 00
	“ “ “ Pasadena.....	30 00

	“ “ “ Palo Alto.....	20 00
	“ “ “ Pleasanton.....	20 00
Feb.	“ “ “ Winters.....	10 00
	“ “ “ San Mateo.....	20 00
	“ “ “ Napa.....	30 00
	“ “ “ Chico.....	20 00
	“ “ “ Anaheim.....	20 00
	“ “ “ San Jose.....	40 00
	“ “ “ Riverside (bal).....	10 00
	“ “ “ Oceanside.....	10 00
	“ “ “ San Bernardino (bal).....	10 00
	“ “ “ Santa Cruz.....	30 00
Mar.	“ “ “ Oakland.....	50 00
	“ “ “ Sacramento.....	40 00
	“ “ “ Fort Jones.....	10 00
	“ “ “ Vallejo.....	30 00
	“ “ “ Redding.....	20 00
Apr.	“ “ “ Eureka.....	30 00
	“ “ “ Rio Vista.....	10 00
	“ “ “ Vacaville.....	20 00
	“ “ “ Woodland.....	20 00
	“ “ “ Long Beach.....	20 00
	“ “ “ Santa Monica.....	30 00
	“ “ “ Hanford.....	20 00
	“ “ “ Redlands.....	30 00
	“ “ “ San Leandro.....	20 00
	“ “ “ Fresno.....	30 00
May	“ “ “ Pacific Grove.....	20 00
	“ “ “ Modesto.....	20 00
	“ “ “ Calistoga.....	10 00
June	“ “ “ Whittier.....	20 00
	“ “ “ Etna.....	10 00
July	“ “ “ Gilroy.....	20 00
	“ “ “ Santa Ana.....	30 00
	“ “ “ Suisun.....	10 00
	“ “ “ St. Helena.....	20 00
	“ “ “ Sausalito.....	20 00
	“ “ “ Ferndale.....	10 00
	“ “ “ Kern.....	20 00
	“ “ “ Antioch.....	10 00
Aug.	“ “ “ Colusa.....	20 00
	“ “ “ Yreka.....	20 00
	“ “ “ San Pedro.....	20 00
	“ “ “ San Francisco.....	60 00
	“ “ “ Elsinore.....	10 00
	“ “ “ Hollister.....	20 00
	“ “ “ San Diego.....	40 00
Sept.	“ “ “ Nevada City.....	30 00
	“ “ “ Benicia.....	20 00
	“ “ “ Santa Paula.....	10 00
Oct.	“ “ “ Marysville.....	30 00
	“ “ “ Lakeport.....	10 00
	“ “ “ South Pasadena.....	10 00
	“ “ “ Merced.....	20 00
	“ “ “ Santa Rosa.....	30 00
	“ “ “ Tulare.....	20 00
	“ “ “ Visalia.....	30 00
	“ “ “ Emeryville.....	20 00
Nov.	“ “ “ Red Bluff.....	20 00
	“ “ “ Pleasanton.....	10 00
	“ “ “ Petaluma.....	30 00
	“ “ “ Modesto.....	20 00

	"	"	"	Paso Robles.....	20	00
	"	"	"	Auburn.....	20	00
	"	"	"	Bakersfield.....	30	00
	"	"	"	San Rafael.....	30	00
	"	"	"	Alameda.....	40	00
	"	"	"	Oakland.....	50	00
	"	"	"	Santa Clara.....	30	00
Dec.	"	"	"	Ventura.....	20	00
	"	"	"	Livermore.....	20	00
	"	"	"	Watsonville.....	30	00
	"	"	"	Sonoma.....	10	00

Total.....\$1,835 62

EXPENSES.

Secretary's salary.....	\$900	00
Office rent.....	240	00
Expenses of convention.....	218	25
Typewriting.....	120	00
Postage.....	23	50
Printing and stationery.....	16	75
Typewriter supplies.....	4	25
Collections on city warrants.....	6	45

Total.....\$1529 20

Balance cash on hand.....306 42

\$1835 62

There is now due the League for dues the sum of \$450.

The annual revenue of the League from the present membership is \$1,980.

Respectfully submitted,

H. A. MASON, Secretary.

The President. If there is no objection, the report of the secretary will be received and placed on file for inspection by the Executive Committee of the League as an auditing committee, as they have not as yet availed themselves of that privilege, though they have the Secretary's books here for that purpose, or by any member of the convention who desires to examine it. It is so ordered.

I am informed by our Secretary that it is the custom of the League to appoint a committee designated a Committee on Program at the opening of the convention, to make a report at the close thereof embodying suggestions for committees to serve for the coming year. A motion is in order to that effect, if that is your pleasure.

On motion of H. J. Crumpton, of Sausalito, seconded by Trustee J. W.

Morgan, of Auburn, the chair was authorized to appoint a committee of five as a Committee on Program.

(Followed by Roll Call, omitted—to be published in Jan.)

The convention then took a recess until 2 o'clock P. M.

Afternoon Session.

Upon assembling in afternoon session, photographs were taken of the members of the convention in the convention hall, after which Dr. Davey of the Santa Clara Valley Improvement Club, extended to the delegates an invitation to visit San Jose's "playground," Alum Rock Park, at some time during their stay in San Jose, which invitation was accepted with the thanks of the Convention.

The Secretary then read the following communication:

WASHINGTON, D. C., DEC. 4, 1902.  
H. A. Mason, Esq., Sec'y League of  
Cal. Municipalities:

Dear Sir:

I have been unexpectedly summoned to Washington on legal business, and cannot be back in California until after your annual convention at San Jose. It is a matter of the keenest regret to me that I cannot be present. I had made all my plans to attend and take part in the proceedings. Please convey this message to the convention.

JOSEPH HUTCHISON.

The Use of Oil on City Streets.

The President: This afternoon is set apart for the discussion of the question of the use of oil on city streets, as announced, though I think it is not intended to confine it entirely to city streets, but to include country roads as well. The discussion will be opened by Mr. C. N. Kirkbride, City Attorney of San Mateo, who will give us a report of the legal status of the question of the validity of the patent under which it is sought to make the municipalities pay a royalty.

Mr. Kirkbride. Mr. President and



Gentlemen of the Convention; I regret to say that I am not in a position to render an opinion upon the question of the validity of the Mattern patent for the use of oil on streets. For the benefit of those who were not at our last convention, I will say at the outset that we there devoted considerable attention to the subject of the use of oil on streets and roads. There appeared before us at the time Mr. Mattern, of Los Angeles, who claimed to be the inventor of the process of oiling streets and to have a patent therefor, and which he claimed was being infringed by the municipalities in this State. This patent has attracted a great deal of attention throughout the country, owing to the fact that is is claimed under it that a royalty is due from every municipality or corporation or company using oil upon roads. Up to the time of our last convention, no suits had been brought to test the validity of the patent, and the last convention was very desirous of getting a definite opinion upon the subject and that the matter should be brought to a head. Of course, any opinion that might be rendered outside the courts would not be a finality; a resort to the courts is the only way to settle the question. After the matter was referred to our committee, we devoted some little attention to it and had some little correspondence upon it, and my report at this time is simply to tell you the status of the matter and what the claim is.

The claims of Mr. Mattern's patent are as follows:

"1. A road having a covering consisting of fine earthy or mineral matter and heavy oil incorporated therewith, substantially as set forth." You will note that he there says "a road;" that would be construed to mean a street also. The only two elements there set forth are a road and heavy oil incorporated therewith. The second claim is:

"2. A road having a covering consisting of fine earthy or mineral matter

and heavy oil and maltha incorporated therewith, substantially as described," the only change there being that the word "maltha" is added. The next claim is:

"3. A railway roadbed of fine material such as gravel, sand, or cinder, having its surface treated with heavy oil, as and for the purpose set forth." That claim does not change anything, except that it adds a railway roadbed. In other words, Mr. Mattern claims that when you put oil on your roadbed, you are infringing the manufactured article which he has patented; just as if you had a patent on some pumping machinery and another man came along and takes iron and other materials necessary and constructs a pump similar to your pump, you would claim that that was an infringement on your patent. Mr. Mattern says that if you take so much roadbed and so much heavy oil and mix them together, you are encroaching upon his patented rights, and the question is whether his claim and patent are valid or not valid. I will say that it seems that there is a certain novelty about the use of oil on a roadbed. It accomplishes a certain definite purpose, and it is in a sense an advantageous purpose. It is a useful purpose, as people are coming to believe more and more every day. Therefore it seems to a certain extent to fulfill the laws of the United States covering patents, one of those requirements being that it should be useful. Another proposition is as to whether it is new. It rather seems to me that Mr. Mattern has got the best of the argument in both particulars. For instance, it appears from certain expired patents that even water has been used for sprinkling railway roadbeds for the purpose of keeping down dust. These patents are No. 5485, issued May 16, 1848; No. 28,764, issued June 19, 1860; and No. 165,184, issued July 6, 1875. Then there was another patent, No. 80,351, dated April 27, 1869, wherein it was proposed to sprinkle

coal tar upon the surface of a wood pavement in which the interstices between the blocks are filled with gravel. There they were taking coal tar and forcing it down in the gravel, not a very different proposition from putting oil in gravel, even though there are no blocks of wood in the gravel in the latter case. So I repeat that it appears to me that Mr. Mattern has a little bit the best of the argument on the proposition that this is a fit subject for a patent. The weakness in Mr. Mattern's position, however, is in the fact that his claim may be proven to be not new, and it is upon that point that I have been unable to obtain any definite information of a satisfactory nature. Dr. Woodbridge, in his bulletin issued by the Southern California Academy of Sciences, says that oil has been used on streets down there in Southern California almost from the time when the memory of man runneth not to the contrary. I wrote him several letters, asking him to be a little more specific and tell me the particular year and street, etc., and so far I have been unable to get a satisfactory reply from him. I have also been unable to get as satisfactory information as desired from Mr. White, of Chino, San Bernardino County, who is possibly the most expert man that we have at this business. But I understand that the matter has been taken into the courts in Los Angeles, and we shall await the result of the suit with a great deal of interest. I will say that it seems to me that we might look upon the matter of the patent as being a little more serious one than we first thought it to be. For instance Mr. Woodbridge publishes a letter from the Superintendent of the Southern Pacific at Los Angeles in which they take the position that the railroad is not liable to the payment of the royalty. I recently asked Mr. Culverwell, the Superintendent of the Coast Division of the Southern Pacific, what the Company's present view of

the patent was. It is using oil, you know, for sprinkling the Coast Division lines. Mr. Culverwell told me they were paying the royalty asked by the patentee. That shows that the railroad companies are looking upon the patent as a valid thing. While I do not pretend to say that the patent is valid to the extent of covering the oiling of roads, it looks to me as if the result will be that, unless we can establish the fact that oil was used prior to the issuance of this patent for the purpose of making roads dustless, our cities will have to deal with the patentee.

Trustee W. H. Turner, of Merced. I would like to ask Mr. Kirkbride about that patent for sprinkling with water. Was there ever any suit entered to test the validity of that patent?

Mr. Kirkbride. Not to my knowledge.

The President. We have heard from the legal side of the question. I am now going to call upon Mr. Fowler, of Redlands, who comes from a section of the country where they have been using oil for a number of years, at least three or four, to state to this convention what he thinks of the feasibility of oiling roads, and how it operates, and the general impression in the community where it is used.

Trustee Wm. Fowler of Redlands. We first adopted the plan in Redlands of oiling our streets for the mere purpose of subduing the dust. Three years ago this last summer the dust with us was almost intolerable.

People got so they would have to leave the city, and they said they would be compelled to leave permanently, unless some method was adopted to prevent the dust from filling their houses. I will say that we have found it a success. This is our third year. I asked our Street Superintendent to give me the figures for the present year as to the number of barrels used, cost, etc. These are the figures



that he has given me:

Miles oiled 18 feet wide.....	24½
Miles oiled 12 feet wide.....	3½
Miles oiled 24 feet wide.....	3
Miles oiled 36 feet wide.....	2½
Miles oiled 15 feet wide.....	1

Total number of miles oiled	34½
Number of barrels used per mile.....	154
Cost of oil per mile.....	\$118.50

The President. That is per annum?

Mr. Fowler. Yes, for the season. I think it commenced in May, probably.

Mayor D. C. Clark of Santa Cruz. How many applications do you make per year?

Mr. Fowler. Only one application. The cost of applying the oil per mile, in addition to the above figures, is \$20. The total amount of oil used on streets for the year was 5312 barrels, other than used with sand. Where the chuck holes had formed, we put in sand mixed with oil and filled them up. The amount of oil used in mixing with sand for filling chuck holes was 1136 barrels; cost of oil.

Mr. Turner. This is the third year, I understand you?

Mr. Fowler. The third year, yes. The first year I think it cost us something more than that. Our soil is part of it sand and part of it adobe. This year we have used nearly one-half more oil. Mr. Glover invented a spreader that he used in spreading cold oil. On our adobe soil we find that the hot oil is the best; it penetrates the soil better. But on the sand, I don't know but the cold oil is just as good as the hot oil. We do not put hot oil on those streets which have formerly been oiled; it is only required to have it put hot once on each street. Our streets are comparatively dustless now. I don't care how hard the wind blows, there is almost no dust. We do not oil the whole street, of course; we oil only 17, 18 and 20 feet wide, and we think it pays for more than one oiling. As it is now, we keep our orchards clear from dust, we keep our houses clear of it, and our

merchants keep their stores free of it. In the winter season, when we sometimes have rains, as we have quite a grade to our streets, on some of them the water runs off pretty rapidly. But it does not affect the street—it runs off like water from a duck's back. So I think that in that way we are saving a great deal by not having our streets washed out. In fact, I don't suppose there is a man, woman or child in the whole town who would not seriously object if we were to stop putting oil upon our streets, and none of them refuse to pay their proportion of the money assessed. We charge one-half of it to the property owners, and the city pays one-half. Our oil costs us 78 cents a barrel.

Mr. Turner. Is that put on the road 78 cents?

Mr. Fowler. 78 cents delivered.

Trustee Frank Ey of Santa Ana. As we were informed last January at Los Angeles that Redlands had taken a greater interest in the subject of oiling streets than any other city, I want to ask the gentleman from Redlands some questions. For one, I promised the convention last January that we in Santa Ana should go into the business of oiling streets. We have not gone in very deeply, but we have done some work, and have made arrangements for Orange County to use it. We have oiled a number of miles in Santa Ana and as the result of our experiences there, which has not been altogether favorable, we have been criticised as to our work. In Orange County we have all kinds of soil. In some parts of the town where we put on oil, the heavy wagons will take that oil and carry it on, and they cut out holes, and they kept on cutting them out, and I never saw larger holes in a road in my life than there are on the roads that have been oiled. There is something that we have not been able to find out about how to oil a road, and we want to learn

that something at this convention.

The President. I think you have used your roads too soon after oiling. You ought to close your roads after the oiling and let the oil sink in. You might oil half of the road at a time.

Mr. Ey. In regard to the question of rain: We had some rain down in Santa Ana, and our roads which were oiled looked very bad indeed after the rains, and we were again criticised. So if there is anything that can be done to help us out, I would like to know it.

The President. How do you prepare the surface of your roads, Mr. Fowler.

Mr. Fowler. I must confess that our roads were not in very good shape when we first put the oil on. I always suggest that no street be oiled until it is properly graded, crowned up, and rolled. Then we want from 1 to 3 inches of dust, and we put on the oil and work it in with a machine something like a hay-feeder. But if it is near the city, near the business part, we have wagons with sand, and we throw that right on first, and then we work it in, and a wagon will drive over it, and it will not stick either to a lady's dress or a carriage. We have no complaints whatever about that. But when we oil a street, we always keep the people off from one-half the street a day or two, until the ground gets well saturated, and then we oil the other half, and let them travel on the half first prepared.

City Attorney A. Kincaid of Redwood. Do you macadamize your roads first?

Mr. Fowler. Not at all.

Mr. Kincaid. Do you have your main streets oiled?

Mr. Fowler. The main streets, running through the center of the business parts of the town, are paved.

Mr. Kincaid. We are very much interested in that at the present time. We are thinking of doing something with our main street, and the question is, What shall we do? Some say use

oil; others asphaltum. We want to find out which will be better for the main traveled streets of the city.

Mr. Fowler. I would say that we have about two miles, or two and a half where our heavy hauling is done. All our stone, gravel and sand is hauled over this one street. I was over that one day last week, and the road was laid in the sand there, probably 3 or 4 inches deep originally. We had from 4 to 6 inches of red soil scattered over that about 16 feet wide. Then we gave a franchise to a street railway to run cars over the street, and they went into the center of the street. They agreed to replace the dirt that they moved, so that the road would be in as good shape as before their putting down the rails. We put on the oil, and they paid for the oil 2 feet on each side of the track. We put on, I think, about 14 or 16 feet, perhaps 18 feet, besides, on each side of the track. Our teams are hauling there anywhere from ten to twenty teams a day, loaded with rock. And with all that, that pavement is just as smooth as an asphalt pavement. I was surprised when I was over it last week to find that they had not cut it up. Four or five or six-inch wheels would hardly make a dent in it. It was really just as smooth as a floor.

Mr. Kincaid. How does the cost of it compare with asphaltum?

Mr. Fowler. I cannot tell you. We have not any experience in that direction.

Trustee C. W. Armstrong of Calistoga. I would like to inquire if you have had any experience in oiling roads from material that is of an adobe character, or hard substance, where sand or other light material is not available for covering? We have had an experience in our town, oiling some of the roadways over which there is extremely heavy traffic, with very heavy loads on narrow tired vehicles, on which the oil was applied when the road was very dusty, and we have had the same experience



in that connection that Santa Ana has—that it gouges out holes, and when it rains it does not dry up; and as a consequence, our roadway is in a worse condition than it was formally, at least a portion of it. Some of that is doubtless due to the fact that the dust on some portions of it was so deep that it formed too high an embankment on the sides. We used a heavy scraper, throwing the dust that was on the un-oiled portion onto the oiled part, but it did not seem to make a good mixture, and did not become adherent. The heavy vehicles, although they are kept off of it for about three weeks, picked it up and carried a good portion of it along, and part of the holes so made have been filled with adjacent substances, but with indifferent success. The question is, What is to be done in applying oil in places where sand cannot be had? I will say that our roads have been graveled and fairly well rounded, but material calculated to be an absorbent had not been found.

Mr. Fowler. I would get sand, if possible. Very likely you have some sand around somewhere. We used hot oil with our adobe, as I said before.

Mr. Armstrong. We used it hot also, but it was inclined to run off the roadway, and not to dry.

Mr. Fowler. What time of the year did you put it on?

Mr. Armstrong. In July and August.

Trustee B. Bruck of St. Helena. You said that you made up your road before you used any oil on it, and that then it became dusty afterwards.

Mr. Fowler. Yes.

Mr. Bruck. What is the advantage that, if you have dust just the same? What advantage has it over roads that are already dusty? Is it simply the shape?

Mr. Fowler. Simply the shape of the street; that is all.

Mr. Bruck. Our experience with oil in St. Helena has been the same as that of Calistoga. We have tried it on a small

scale, and since the rain, the road is full of chuck holes, and the oil and dirt and everything are all mixed up together, and it is very hard indeed to travel through there.

Mr. Fowler. We keep a man on the street where there are chuck holes, and keep them filled up.

The President. Is the idea to prevent chuck holes?

Mr. Fowler. No, but you can't have a good road unless you have them filled up.

Mr. President. The oiling of the road takes the place of sprinkling as well?

Mr. Fowler. Yes, but if you merely sprinkle the roads, you don't get the surface and shape that you do if you oil them.

Trustee J. L. McFarland, of Riverside. Those who were present at the last convention will remember what our Mr. White had to say upon the subject there. We took the subject up in Riverside last year, and we oiled twenty miles of road, on all sorts of soil. We have found that it is impossible to have a good road unless the roadbed is first prepared, for the reason that if you get chuck holes, the wagon wheels, as they go down into the chuck holes, constantly wear away the edge of the surface and increase the size of the hole, whereas, if the roadbed is properly made in the first place, graded up, not the loose dirt scraped into the chuck holes of the road as it is before oiling, but the whole roadbed fixed up so it is fine and smooth and hard, and then the oil applied, then if there is a slight amount of dust thrown on top of the oil when the oil is hot, and then it is allowed to stand, it does much better. On a sandy road, however, where we were working it, we found that it did much better when the oil was worked into the sand. It was the same way with the decomposed granite. The best roads that we have are made of decomposed granite, of various depths, according to the character of the soil, from 2 to 4 inches, which is placed upon the roadbed after it

is graded up in the first place, and the oil put on top of that, and then it is rolled. Those who drive fast horses say they prefer those roads to anything else that is made. After a rain, some four hours, I drove over one of the roads, and it was just like an asphalt pavement. There is still another class of roads that we have made. In the cities, instead of making a regular asphalt pavement, we lay first  $3\frac{1}{2}$  inches of broken stone, and on top of that  $2\frac{1}{2}$  inches of decomposed granite, and then the oil. Those roads are capable of sustaining as heavy, if not heavier, loads than asphalt pavements. The cost of that sort of a roadbed of broken stone with decomposed granite or wash sand, which you can often get, is much less, of course, than a concrete or asphalt concrete pavement. We have oiled with both hot and cold oil at all distances from the town, and our oil has only cost us approximately 73 cents a barrel laid down at Riverside. We first built large tanks, so that we could obtain it from the companies at such times as they could deliver it to us. Each tank holds ten carloads. The tanks are right near our sub-station of the electric lighting plant, and the oil is heated right there at the substation, and the hot oil is run through into the wagon tanks. However, it has been shown that you cannot haul even hot oil a great distance so economically, and therefore we have applied cold oil, especially in the hot summer months, over different kinds of streets, and, although it is to a certain extent satisfactory, we have not found it as much so as hot oil. In order to get at the exact cost, and to keep strict account between the electric light department, which uses oil, we have allowed the street department to buy from the other department at 80 cents a barrel. It has cost us about 12 cents a barrel to put the oil on the road, and a barrel of oil is 42 gallons. That counts in the labor of handling and putting it on, and putting it into what is called the oil mixer, and all matters of that kind. It is hauled from

our own tanks into all the county about. Riverside and San Bernardino counties, and I think Los Angeles county, are to join hands, by the way, to contest the Mattern patent, which has been mentioned here. We are waiting to see the outcome of that suit before we decide to pay any royalty. The suit has been commenced, and their demand for royalty is \$10 a mile per year; I think in one or two places \$15.

The Secretary. The oil patent men made some statements last year as to how much they proposed to charge, and they qualified it by saying that if they came up and settled, they would make some rebate.

Mr. McFarland. I think the offer made to us was \$10 per mile if we would pay up. In this cost of 12 cents per barrel, of course I estimate what is paid the teams for doing the hauling. With us we have been paying in that way  $22\frac{1}{2}$  cents an hour for a man and team. So you have to calculate in the different elements of cost.

Mr. Armstrong. Do I understand that you pay for a man and team only  $22\frac{1}{2}$  cents an hour?

Mr. McFarland. That is correct.

Mr. Armstrong. How many hours a day?

Mr. McFarland. Nine hours. There is no wagon to be furnished, of course; it is only the teamster and his horses. To repeat, I would say that the best road is made by putting decomposed granite and wash sand on the road before using oil.

The President. What would you answer to Mr. Ey's question of a little while ago with reference to their difficulties?

Mr. McFarland. I might ask this question first: Did you grade up your road in the first place, before putting on the oil, or take it in its natural state?

Mr. Ey. We took it in its natural state.

Mr. McFarland. Unless the road is approximately in a perfect shape in the



first place, I do not think there is much hope for it.

Mr. Ey. Mr. White told us a year ago, and the man who had charge of your streets in Los Angeles said that before he put on the oil he would sprinkle the streets with water, say twenty-four hours before. Here come other parties, and one of them is our Superintendent of Streets, who say differently. I would like to know what others think about that.

Mr. Armstrong. While we are discussing this same difficulty that Mr. Ey had, I will say that our roads were graveled to a depth of six or eight inches, but they had had about a year's wear after that and no further preparation, were what we called good roads, capable of sustaining very heavy traffic and which had not been sprinkled at any time, at the time the oil was put on. But the ground is rather low-lying, and the annual rainfall with us approximates 40 inches, so that it never gets as dry as it does in some sections.

Mr. McFarland. First with reference to Mr. Ey's road: Putting oil on the dust is not a satisfactory way, for the reason that the oil, mixing with the dust, unless traffic is kept off for a long time, is picked up by the wheels and makes a sort of paste, on account of the hard roadbed underneath, and does not enter into it. For that reason, in preparing the roadbed when you intend to put on the oil, it is a sort of moist condition, to a certain extent so that, as Mr. White said before at Los Angeles, if you want to put it onto an ordinary, hard road, without anything more to it, he advised sprinkling it so as to have the surface of it just damp, as it were, and the oil then would have perhaps more penetration. We have tried it on a regular macadam road, to see what the effect would be, and we found that on that hard rock surface, it was better to sprinkle the surface and have it moist. As to the other gentleman's road, which I understand is in Napa County, if the

road bed is crowned up so that the water has a chance to run off from it, and sufficient oil is put on so that it will mix in the gravel and the earth, the travel over that should work it over rather than make chuck holes in it. The trouble is, if you put any substance on top of another hard substance, with nothing between the two that tends to make them coalesce in any manner, one will run over the other. This is true in the case of a concrete asphalt pavement, especially in some grades—the asphalt surface will work, causing ripples. It is the same way on new roads. If you are going to make a first-class road, the road should be worked up smooth, and then put your gravel on top of that, and then your oil, and they will mix together—coalesce. But you cannot put two hard surfaces together and expect to get any such result.

L. E. McCabe of Visalia. We have had a little experience in oiling roads, and have had some very good results. Our work has been done in this way: The road upon which we first tried it was a very hard road, so hard as to be almost impossible to work it up with a plow. So we saturated it with water, and then took a rotary plow and plowed it up, and then worked it over with a harrow, and we put from four to six inches of nice, pulverized surface, just as fine as we could make it, a sort of loam, and then we applied the oil on this soft bed, hot, and after we had the oil on, we then went over it with a sprinkling of dirt and kept the wagons away from it for several days, until the oil had become well mixed with the material below and had ceased to stand on the surface. Then we let the wagons go over it as much as they wanted to, with the result that it packed down solid, a nice smooth road and dustless, and it continued so until the heavy rain down there, and then in some places it cut out little chuck holes. But before we allowed it to cut up badly, we went over those and loosened them up and filled them up again with

oil, and packed it down, and now the road is almost like an asphalt road. About a month ago I think we had about three-quarters of an inch of rain during the night, and in the morning the road was very soft on top. But as soon as the surplus water dried off, it came back to its old state, and is just as hard as can be. So it seems to me that very much the best results are obtained if you properly prepare the road before the oil is put on.

Mr. Turner. Merced has had a little experience in oiling roads that may be of interest. We at first put common gravel on the road at the bottom. We are now putting on a red gravel which makes a cement, and on top of that we intend to put two inches of sand to retain the oil—of course, the original surface is hard. We are going to put the oil on top of the sand, and that will keep the dust out. If we do not do that, the oil will not penetrate the surface, it being a hard substance, while by putting on the sand and gravel, the oil will mix in and we think will make a fine road. That will be on a road from the depot to town, where there will be a great deal of heavy travel. Outside of the town limits, down in what is called the sweet potato country, they have sand, and there they have been putting on the oil for about four miles, and they have got a splendid road; in fact, you could not ask for a better. They run big wagons and small wagons on it, and it is always in good shape. We do not have six-inch tires, either, but two or three inch tires, and yet it does not cut it up a particle, or has not so far. We intend this next summer to oil practically all of the streets in Merced. We pay a good deal for water and for sprinkling, and we think this will save us expense.

Trustee A. T. Lightner, of Bakersfield. Bakersfield has had some experience with oil. We are in the oil district. This morning, while I was coming in, I wrote down a little memorandum which I will read to you. During the year end-

ing December 1, 1902, we have oiled about 24 miles of streets and avenues, and of that distance about 21 miles of streets were covered 22 feet wide,  $2\frac{1}{4}$  miles about 54 feet wide, and the remaining  $\frac{3}{4}$  of a mile about  $81\frac{1}{2}$  feet wide—that is, the full width from curb to curb of the avenue. Over this area there were used about 8500 barrels of oil, at an average cost of  $47\frac{1}{2}$  cents per barrel applied to the ground, amounting to \$4027.50. Of this amount, \$3300 was paid by the city, and the remainder by individuals. One application of oil, properly applied, will serve for one year. The best results are obtained when the street is properly prepared before receiving the oil, that is to say, by first plowing up, loosening the hard ground, and using then a harrow and other machine for pulverizing the lumps of dirt, and then bringing the street to proper line of grade and applying the oil as hot as possible. An oil of heavy gravity makes a better street than the lighter oils. The quantity of oil required to make good streets depends upon the quality of the soil. In Bakersfield, where the soil is mostly sandy loam, it is estimated that 72 barrels of oil per block, that is, from center to center of the streets, a distance of  $346\frac{1}{2}$  feet by 54 feet wide, is about the right quantity. That is the area that we cover with 75 barrels of oil. After the oil has been applied, traffic should be kept off the street for about two days, giving the oil a chance to percolate into the soil. A better street is insured by harrowing thoroughly the surface after the oil has been applied. The best machine that we have any knowledge of for finishing a street after using the oil is the Francon Tamping System, which is an invention lately introduced, and is now being used to improve streets in Fresno. This machine was operated in January of this year in Bakersfield, and it made a perfect street, almost equivalent to an asphalt pavement, by driving the oil into the ground and at the same



time tamping the surface until it was perfectly solid. With the use of this machine, less chuck holes will occur in the streets, as it mixes all the parts alike and solid. The question of chuck holes here it seems to me could be greatly overcome by a machine of that kind. It operates very similarly to a band of sheep driven over a street: it tamps every particle of the street with the same force, and is a cylinder with spikes or teeth sticking out of it, something like the cylinder of a thrashing machine. You can put any quantity of weight on it, so as to make it penetrate the soft ground as far as you like, and it punches holes in the ground, allowing the oil to follow in—drives the oil, you may say, into the ground, by making holes in the ground, and tamps it as you would tamp it with a tamper by hand. By the use of that machine, we made a perfect street right in the coldest weather, where the oil was frozen almost the minute it struck the ground.

The President. You found that work entirely satisfactorily, so far as your experience goes?

Mr. Lightner. The best results that could possibly be obtained are obtained by that method of putting it into the ground. In addition to the 24 miles of street oiled in Bakersfield during the past year, there has been on the county road about 75 miles of sprinkling of oil done, with the most satisfactory results. It not only settles the dust absolutely, but it makes a solid roadbed for heavy traffic, that is when it is properly prepared. Our method is to apply the oil and work it into the surface before the traffic goes over it, and then you have a solid roadbed and avoid the chuck holes to a great extent. It might not operate so well in adobe soil or a clay soil as it does in the kind of soil we have down there. I am convinced that too much cannot be said in favor of oiling our roads and streets. The sprinkling wagon has been entirely displaced in Bakersfield. Prior to the introduction of

oil, we paid about \$3000 a year for sprinkling, and with very unsatisfactory results. Moreover, in Bakersfield it is so hot in the summer time, that if you drive over a street with a sprinkling wagon, before you can get back there again evaporation has taken place and the street is as if it had not been watered. We now oiled two-thirds more streets than we sprinkled with water, with a perfectly satisfactory result.

The President. What of the comparative cost?

Mr. Lightner. In Bakersfield we are very fortunate in getting oil cheap. It only costs us 47 cents a barrel delivered and applied, and the oil is heated to a temperature of 212 degrees.

Mr. Turner. Do you think it is necessary to heat it, in that hot climate?

Mr. Lightner. We think it is advisable. One application of oil on our soil, where it is properly applied, will last a year, with excellent results.

Mr. Armstrong. What gravity of oil do you use?

Mr. Lightner. I cannot tell you, but the heaviest weight is the best. Our heaviest oil comes from the Kern River fields, and it only cost us this year, under contract, 45 cents a barrel applied to the ground.

Mayor L. D. Stephens, of Fresno. I presume most of you have the advantage of Fresno in that you were present at the last convention and got the ideas that were at that time given to the public. We have been experimenting at putting oil on our streets, working under difficulties in some cases. We have put it on without preparing the street, and that was not satisfactory. We found that when we put it on the hard street, the dust would form with it a kind of muck or mud, and it would be carried off. We tried it by applying it to the street dry, and then by wetting the street first and plowing it up. We found the most satisfactory way to be the way just explained by the gentleman from Bakersfield—plowing the

street up and rounding it up nicely, and, after getting it rounded up to a proper grade, putting the oil on. We barrowed the oil in with a spring-toothed harrow. Last year we used forty barrels to the block, but we find it more satisfactory to put on seventy barrels, and so that is our present application. We put on water, because that helps pulverize it. We have one advantage, I presume, Mr. President, over other parts of the country, in the fact that our soil is all sandy. Just before I left home, we prepared one block with the tamping roller that has been spoken of, and we were very much pleased with it. That tamping roller is a cylinder with teeth on it, but each tooth had a head on it like a nail head, I judge perhaps an inch and a half across on the face of it. So when it goes in, it is like a tamping rod, and it not only makes a hole, but it carries the surface material in front of it and tamps it down.

The President. Does that make an even surface?

Mr. Stephens. It does. Of course, you have to keep going over it, and, as you do it, you get a proper mixing of the surface with the lower part of it. After we got that part of our street prepared and finished, I found that I could strike a match on the surface of it; it is as smooth and almost as good a road as our asphalt roads. We expect it to get smoother and better as it is used. On that block we used 70 barrels to the block, the street being 60 feet between the curbs. We oiled altogether last year about 20 miles of streets, and in all kinds of shapes and manners. We did everything we could think of. But this work that I have just explained has been the most satisfactory. And while we used the tamping roller on that, we have continued the street right on down without using the tamping roller, and we are going to see what we can do with that. We expect to experiment a great deal during the next twelve

months. We are going to plow all of our streets up and use oil on them, and use two or three different ideas, so that we will before long know what is the best. We do not think the method best for one locality is necessarily best for another, on account of the difference in soil. We use the heavy Kern River oil, and it costs us 16 cents a barrel at Bakersfield, and we pay the freight on it and it costs us now about \$40 to prepare that block as I have described. I think by continuing down the street and oiling the whole street at once, the estimate is that we can do it for \$37.50 or \$38, preparing and completing it, and fixing the whole thing.

Trustee W. A. Dresser, of Paso Robles. Our people have had little or no experience with oil. One thing among others they would like to know is this: What would be the probable cost of keeping a road in good repair after it has been worked up to a high state of perfection? Mr. Fowler has told us that they used something like 154 barrels to the mile, and has told us about a road that was in a high state of perfection, that it was very hard and stood the heaviest traffic. What would be the probable cost of keeping that road in that condition? We can stand a pretty heavy expense to begin with, if we can look forward to a time when oil will not be used to so great an extent or so often. Would they discontinue the oil for a period, or would they keep putting it on as often and putting on a less quantity?

Mr. Fowler. I think we should use the oil every year, but less of it than upon the first application.

Mr. Armstrong. Your experience indicates, then, that you could use less oil each year that you apply it?

Mr. Fowler. Yes, and you will find that you will have streets that, after the heaviest rain, will be so that you can walk for miles on them without wetting the uppers of your shoes, just as you can with asphaltum, and that just by



oiling once a year.

Mr. Stephens. In Fresno, on our streets that are oiled, I noticed that after this last rain, the streets not oiled were very muddy, while the streets that had been oiled were not muddy at all and were in good condition, and as soon as the sun shone on them a few hours, their condition was just as good as before the rain.

Engineer E. N. Eager, of Suisun. We have had a little experience this winter in oiling macadamized streets. We finished the oiling of them about two or three weeks ago. That shows that oil can be put on at this time of year. It was not put on very hot, either—about 70 degrees. The street had been macadamized in the usual way, but there was some rain afterwards, and as soon as it dried a little after the rain, it was oiled, and about half or three-quarters of an inch of sand was put over the oil immediately after the oil was put on. And now, after about two or three weeks' use, the streets have a fine surface, and the travel over them is almost like going over an asphaltum road. Sufficient sand was put on to absorb the oil, after the oiling, and then the traffic was put on the street immediately.

Mr. Armstrong. What was the surface of the road where you applied it?

Mr. Eager. Macadamized.

Mr. Armstrong. Was there any fine material on top?

Mr. Eager. Hard rock screenings. It was macadamized in the usual way, and then oil put on top of that.

Mr. Ey. Do you know the cost of it?

Mr. Eager. It was done by contract, and it was 15 cents a square yard—pretty costly.

The Secretary. As I understand it, your proposition at Snisun was that the oil was a part of the original specifications in the construction of the macadamized street?

Mr. Eager. Yes. It was done by contract. We first had a layer of coarse rock, and then screenings, and then the

oil, and it is all done under the one contract. The road was rolled, but no traffic was allowed on it until after it was oiled. After the oil was put on, there was about three-quarters of an inch of sand. There was no rolling, however, after the last sand was put on. There was supposed to be a gallon of oil to the square yard used—maybe a little more than that.

Mr. Bruck. I have understood that in Suisun the teamsters complained of the oiled road making the traffic a good deal heavier—the pulling. Do you know anything about that?

Mr. Eager. The oiling has only been done a very short time, and there has not been time to test that as yet.

Mr. Armstrong. We have not yet heard anything very definite about the class of traffic over these roads. In some instances it has been stated that they simulate asphaltum pavements. I would imagine, if that is the case, that with heavy teaming or fast driving, it would be affected somewhat by the grade. If there has been any experience with heavy grades, we would like to hear a little bit about that and the nature of loads, if very heavy loads, and whether the tires used are narrow, and how it would operate where the brake would be applied going down the hill and the wheels would slid, or on grades so steep that they might have to use shoes on the wheels and have them slide. What would be the effect there? Would the pavement be so hard and smooth that wheels would slide and slip around, or the horses slip, on this pavement, or is it soft enough so that there would be plenty of hold on them and would they wear out and tear out from that friction?

Trustee J. W. Covert of Riverside. In reference to heavy loads, in hauling oranges they sometimes haul as high as five or six or seven tons at a load, and what little experience we have had has gone to show us that they can haul the same load very much easier over the oiled road than they could before. We

do not have any very heavy grades there.

The President. Will you explain to the convention something about the cost of putting oil on those roads. I think some of the delegates are not thoroughly informed as to the cost of the application of oil.

Mr. Covert. Mr. McFarland has already stated that the cost of the mere application was about \$20 a mile, after the road was prepared.

Mr. Stephens. I desire to suggest another matter. When the roads are prepared, it is a good plan not to permit the wagons to go in the same tracks all the time. If the road is properly prepared, so that no regular track can be made, it lasts longer. It is the same idea as that involved in the constant drop of water wearing a hole in the harvest stone. When we first permit traffic on one of our oiled streets, we allow them, say, to travel in the middle of the road, and then we block off the middle of the road and make them drive on the side, and we move our block from time to time, so as to divide the traffic and not permit ruts to be made.

Trustee J. O. Lynch, of San Leandro. We have not experimented along this line at all, and we are here for information. Some of the towns have had more than one year's experience. We are prepared, when the time comes for oiling, to oil our roads in good shape. I would like to ask if there is any proper process of preparation for the second oiling. It has been stated that if you put your oil upon a hard bed in the first place, it will slip. Is there any special preparation required for oiling the second time? Is it necessary to soften the road again, or do you just simply sprinkle it with oil, or do you put the oil on and cover it with sand afterwards?

Mr. Fowler. We do nothing after the first application by way of preparation. We do not find that the soil gets so hard that it will not absorb the oil. We do not put on as much the second year

as we did the first. There is another question, and that is in reference to the teamsters—some one inquired about that. I have been watching that matter for three years. My attention was first called to it by the bicyclers, who wondered what made their bicycles go so hard. I think this is the case there: that where there is too much oil put on there is a soft clay sometimes forms and when a horse gets onto it, it springs, too. There was one place that was washed out with us one time, and I had the Street Superintendent go and put some oil and sand on it, a rod or so of it, perhaps, and I noticed that every time I got onto that place in driving, my horse slacked up. I have noticed with teams, too, that it runs a little harder. I cannot account for it, the springing, unless it is the giving way of the soil.

Mr. Covert. Where there has been this granite put on top, the springing does not occur; it seems to harden it, and it becomes a perfectly hard surface. The oil seems to rise in front of the wheel when it is in a soft state. But that is not the case where there has been gravel or sand put on top of it.

Mr. Edwards of Santa Barbara. I would like to ask the gentleman from Kern how he treated the second year the roads that had been first treated with the tamper. Did you oil on top of that?

Mr. Fowler. We have never tried it on top of that, but we don't expect that we will have to do anything except sprinkle the surface.

Mr. Lightner. The only street prepared last winter with a tamping roller, we applied a little oil to this summer, and it went down and absorbed, and we had no trouble with it at all. It worked perfectly.

Mr. Edwards. You did not tamp it down?

Mr. Lightner. No, we did not tamp it at all.

Mr. Ey. When do you prepare your roads, Mr. Stephens—just before you



put your oil on, or some time before?

Mr. Stephens. Just before we put the oil on.

Mr. Ey. You would not prepare them now, would you?

Mr. Stephens. At any time of the year, so long as it is just before you apply the oil.

Mr. Ey. Suppose you were going to put oil on six months hence. Would you prepare the streets now?

Mr. Stephens. By no means. I would not grade the road unless I was prepared to put the oil on at once.

Mr. Ey. You would not want a couple of inches of dust to accumulate and try to put your oil on that?

Mr. Stephens. Certainly not.

The President. There seems to be some difference of opinion between the gentleman from Fresno and the gentleman from Redlands, upon the question of letting some dust accumulate on the street. The gentleman from Redlands says he gets good results by putting the oil into an accumulation of dust.

Mr. Stephens. I think it is likely that the difference in soil will account for it. Our soil is a sandy soil.

Mr. Fowler. I think I said two or three inches of soil on top of the oil.

Trustee N. L. Knudson, of Sonora. We have oiled and graveled about four miles upon our county road. The oil we find makes just as smooth and nice a road as any.

The President. What kind of gravel do you use?

Mr. Knudson. We use the wash gravel from our mines, not very fine. Our four miles of it is a distinct success.

Trustee T. E. Knox of Livermore. We have had a little experience in oiling streets. On our main street, which is swept up every Saturday afternoon by machine at the expense of the town, the portion that has been oiled had a good hard surface. It was naturally a gravel bed, and the two applications of oil we have put on it this summer, we find, as the gentleman from

Riverside says, have slipped and pulled off, after they have been traveled over a short time, and it gets full of chuck holes. The only remedy we had then was to take a coarse sand and gravel and fill up the chuck holes with oiled sand and gravel. We then took another street and graded it with a road grader. We put on a lot of coarse gravel, to a depth of six inches, and rolled it down four or five times and applied the oil to that, and fenced it off at each end for about three-quarters of a mile for three days. Then we turned the teams right on, and they were doing heavy hauling, three to five or six tons to a load, and we have one of the finest of streets. I don't believe any asphalt road is better. That road didn't pull, and there is not a chuck hole from one end of the street to the other, for the reason that it was all plowed up, new fresh dirt thrown up, and gravel on top of that, and the oil went into it directly, whereas on the main street it was swept up every Saturday and nothing left on it, and it had been watered right along before that and was hard, and there was nothing for the oil to mix with. Where the oil has an opportunity to go right down through, it simply cements it all together. It is my judgment that if you apply oil, you must first prepare your streets thoroughly, and then it will be ready for teams to go on after three or four days.

Mr. Armstrong. I would like to inquire if there has been any experience in the application of oil to streets that have been very hard, that have been graveled and then kept sprinkled and kept swept. If so, what is the process? I mean a case where there has been success with such a roadway, what sort of preparation has been given it?

Mr. Covert. I know of a case of a graveled road that had been graveled a year or more, that made a surface as smooth as glass, almost, a short time after oiling.

Trustee J. S. Collins, of Ventura. I

would like to ask the Mayor of Fresno, if the city pays the expense of the oiling, or if part of it is charged to the property-owners?

Mr. Stephens. The city has been paying the expense of it on all the streets we have used it on so far. We expect to change the specifications, however, of our street grading, so that the contractor in future will always apply the oil on all newly graded streets. The streets we have been operating on so far are streets that have already been graded and curbed, but on new streets we intend to have a coating of oil on all of them. We haven't all of our streets graded as yet.

Mr. Kirkbride. The gentleman from Livermore said something about plowing up the street and then putting on gravel. I would like to ask about how much gravel they put on it—one, two, three or four inches?

Mr. T. E. Knox. I will state that in the center we made a cone of 8 inches from the curbing, 8 or 9 inches, of crushed rock.

Mr. Kirkbride. Did you use oil on that?

Mr. T. E. Knox. No, we did not use the oil; we put I should think about six inches of gravel on top of that, and then the oil.

The Secretary. Santa Clara has not been quite as successful as some other cities in oiling her streets, and I think probably the fault was in the preparation of the roadbed. We had graveled streets that had become very hard and cemented, and the only preparation made before applying the oil was to run a harrow over it and break up the top as much as we could and make it as smooth as possible. After the oil was applied, half an inch or an inch of very fine gravel, coarse sand with a little gravel mixed, was put on, and then traffic immediately permitted on the street. In some instances there have

been two applications of oil, one subsequent to this first one described. The result has been fairly successful. So far as laying the dust is concerned, we had very little dust on the streets. The streets were not given any water at all during the summer, and we found it almost impossible to raise any dust there. The surface has become reasonably hard, although there have been defects apparent by reason of heavy traffic. Chuck holes have been formed; and but very little effort has been used to keep them filled up. Since the storms have come on, however, there has been another noticeable phenomena, a slipping process. The loose surface of the oil and gravel that was put on seems to work up in bunches. Sometimes they are four or five and even six inches high, making quite an obstruction in the street. A bunch of this asphalt has evidently been moved up, slipped up away from the surface, showing that there has been an imperfect uniting of the upper and lower surfaces. This is accentuated to some extent by the moisture seeping into the seam between the two surfaces, thus making the slipping process easier. Probably at the time of our first storms moisture got in there, and, under heavy traffic, that has been gradually forced up until, as I say, there are lumps, and in some places it is kind of wavy. You will see examples of that in the regular asphaltum streets in San Francisco and elsewhere. The remedy for that must be evident that the roadbed must be sufficiently stirred up beforehand, sufficiently broken up, to let the oil penetrate and bind thoroughly the top coating with the surface underneath. It seems to me that after the oil has been once applied to the street, if the first application is thoroughly assimilated, the second application will naturally cement itself on to the first, because oil or asphalt will unite with asphalt; your first roadbed having an asphalt surface, and your



second being simply an application of asphalt.

I have very naturally read the reports as they have been published from time to time in the local papers all over the State, and also to some extent in the engineering journals, and have taken a great interest in this oiled road question. I have come to some conclusions in relation to it that may be of benefit, and they may be correct, and may not. It is my opinion that we are still in the experimental stage; that we have not yet reached, nor have we perhaps even formed a clear conception, of the ideal oiled street. I think we will achieve the best results when the oil is used in the original construction of a street. If you can incorporate the oil with whatever material you first use, and use the oil as a material for cementing together the various particles of material, then the best results will be achieved. The best material in the construction for a foundation layer is a layer of coarse crushed rock, properly wet and rolled as compactly as possible; then the finer coating of rock or gravel, and I think that it would be advisable upon that second coat to apply a sprinkling of oil, then on top of that the screenings or very fine material, and before it is thoroughly rolled it should be given a thorough soaking with oil, and possibly let stand for 24 or 48 hours, and, if there is still any surplus oil that has not been absorbed, a sprinkling of sand over that would be advisable, and then give the whole a thorough rolling with a heavy roller, so that the surface is perfectly smooth and uniform. In that way I think you will build up a street from the foundation, and the different layers will bind themselves together completely, and you will have come as near as possible to an imitation of a rock asphalt pavement. Our ideal to work towards in this matter is the asphalt pavement. It will probably be demonstrated after awhile that you will achieve the best results if you can get rid of the volatile oils in the

petroleum. It seems to me that there is a waste of material there, when you put crude oil on the street that contains say 40 or 50 per cent of asphalt, and allow the rest of it to simply evaporate into the atmosphere as waste. By getting rid of and saving the volatile oil by a process of distillation, and incorporating the asphalt only with the road, I think better results would be accomplished. I understand, of course, that there is a virtue in the volatile portions of the crude oil at the present time, because they assist in carrying down underneath the surface the heavier asphaltic portions. But if you can mix it—and I think ultimately we will come to consider that we had better mix the fine sand or fine screenings, if possible, before applying it, in order to get an absolute uniformity—those volatile oils will not be necessary. I know that there is expense attached to that. But after all, will we not come to the conclusion that the expense is really a saving?

A Delegate. I would like to know if any of these gentlemen have had experience with oiled roads on grades of over 25 per cent? We have heard a great deal about the slipping and sliding. If we have a hard surface, a macadamized surface, and a grade of over 25 per cent, we are certainly going to have some trouble with a very hard road.

Mr. Fowler. We have some rather heavy grades in Riverside, and I never heard any complaint in that respect.

Mr. Stephens. There is a matter connected with this that I would like to bring before the convention, and that is the matter of oil freight rates. It seems ridiculous that we should be able to buy oil at 15 or 16 cents a barrel, and then pay 40 or 50 cents a barrel freight on it. During the past year we have been working on the proposition, conferring with railroad officials. At one time we had them in a very nice humor. We presented some good arguments to them. There is no return to come from it, we do not use it for manufacturing purposes

or anything of that sort, but it is only for the benefit of the public, as we told them Mr. Madden, of the Santa Fe, was very much in favor of giving us a considerable reduction on freight rates. And believe that if all the different municipalities in this State interested in the oiled roads matter, will take the matter up together, we might get a reasonable reduction in freight rates.

The President. Unless some delegate has something farther to offer, this will close the discussion on oiled roads. While it is in some respects a dry subject, I am delighted to see the interest that has been manifested in it by the convention generally. There is no question but that good streets and roads are a most important thing for a community. It has been said that a good road is a thing of beauty, and nothing could be more truthfully said. Wherever you see good roads and good streets, you see nice homes. You see well-kept homes, you see the lawns green, you see the school houses well kept up and the churches well attended; and, while we have not fully made up our minds just what it is best to do, yet from the discussion of this afternoon and from what I have heard, I am convinced that oil is a good thing for streets and roads—that it will make good streets and good roads—and the only question is, how shall it be applied to the best advantage? We have heard from almost all parts of the State, and in but very few instances has it proved a failure, as a result, it seems to me, of an improper application of the oil, the road not being prepared to receive it. It is being used very extensively in the south. There is hardly a road that leads out from Los Angeles to-day upon which they are not using oil. They are using oil instead of water to sprinkle the streets, to lay the dust and it forms a hard surface and makes an excellent road.

Trustee O. L. Clark, of Chico. Right at this point, Mr. Chairman, I would like to make an inquiry. We have just

installed a rock crusher at Chico, and my idea has been all the time to plow a street up, grade it, and then put the rock on top of that. Other men who have had some experience in that tell me that, so long as you have a good bed to put the gravel on, you should put it on without stirring up the ground underneath. I would like to know if anyone has had any experience, so as to tell me what is the best way to fix a street with crushed rock, saying nothing about oil.

Trustee C. D. Johnson of Santa Rosa. Santa Rosa has laid about a mile of graveled street within the last two or three years, laid it with crushed rock. In using crushed rock we simply use it on the roadbed, do not plow up the ground first, and our result has been very satisfactory. We coned up two streets with about 8 inches in the center, and one of the best streets that we have in Santa Rosa to-day is a street macadamized in that way.

Mr. Clark. Just one grade or size of rock?

Mr. Johnson. We use three sizes. We put on the solid rocks, rocks that would weigh a half a pound at least, and then the next coat is of smaller rock, and the third coat is the screenings. We have a screener that makes three grades, large, medium and small.

The President. The chair will now appoint the Committee on Programme provided for by this motion this morning. The names of the Committee are: E. E. Canfield of Chico, Chairman; F. K. Roberts, of Santa Cruz; C. W. Chapman, of Nevada City; Ed Tedford of Santa Ana; and A. T. Lightner of Bakersfield.

On motion, duly seconded, the Convention then adjourned until nine o'clock Thursday morning.



### Legislative Measures.

Morning Session, Thursday, December 11, 1902.

President Snyder called the conven-



tion to order at 10 o'clock A. M., and declared the consideration of legislative measures in order for the day.

*Should there be a law looking towards the establishment of a uniform municipal accounting system and the publication of reports and statistics?*

Secretary Mason. An introductory to the paper that I have prepared upon this subject, I will state that about a month or six weeks ago I was waited upon by a special committee of the Merchants Association of San Francisco, asking that this League cooperate with them in obtaining legislation making compulsory the adoption of some system of accounting, uniform if possible, that would apply to the municipalities of the State, by which they could determine the relative efficiency of various city administrations and the cost of the various city departments, with a view of publishing information at large upon questions relating to municipal government.

At all the national conventions of municipal officers and those interested in municipal improvement, this subject has been discussed, with a view of having a system of publicity attached to the doings of local governments, through which it could be ascertained exactly what was going on, with the ultimate result, probably, of securing a more economical administration of affairs. I told the committee of the Merchants' Association that we had already considered the matter and had a committee report upon it, but that we would be perfectly willing to take it up again and to cooperate with them in any desired way to secure the result — because I think it is a very good thing. At a meeting, we went over together the entire grounds and I gave them my impressions, which I shall now present to you in this paper, with which they agreed, and left the entire matter in the hands of this League, saying that whatever we did in that connection they felt would be satisfactory. The title of my paper is:

### **Municipal Accounting, Reports and Statistics.**

The awakening process that has been applied to our municipal life during the past ten years has been productive of remarkable results. New energy has been injected into our local governments, the municipalities have been taking upon themselves new functions, they have broadened the sphere of their activities. They are doing more things, more enthusiastically, more systematically and more efficiently.

All this is largely due to the awakened consciousness of the public mind. People are more interested in their affairs. They have heard the cry of corruption in local government dinned into their ears year after year, until the charge was brought home to the public, that if it were true that our affairs were mismanaged, that it was the fault of the public itself, the mistake of the citizens in permitting such a state of affairs to exist. So when the public conscience realized its wrong-doing it started out to improve things. And the surest way to improve things is to actively engage in doing something. Consequently, we find an increased activity in public affairs. "Every governmental act is educative," says a writer, and the most effective way to interest the citizenship, and at the same time educate citizens to an appreciation of the efforts put forth in their behalf is to do something. Thus we note the increased activities above noted.

This awakening of the civic consciousness is further manifested by a desire on the part of the public to ask questions. The public is like a child trying to gain knowledge—It wants to know why and wherefore, and asks all sorts of questions, material and immaterial, relevant and irrelevant.

In respect to municipal affairs, the public is asking all sorts of questions, many of which are hard to answer. The conduct of our municipal govern-

ments is undergoing a most searching investigation, and its delinquencies are being pointed out and commented upon.

One of the prominent demands at the present time is for municipal statistics. Not only do the people want to know the cost of their own municipal government and of the several departments thereof, but they want to know how that cost compares with the cost of operating other municipalities or similar departments in other municipalities. Efficiency and economy are relative terms and the degree of each can only be ascertained by comparative tests. In order to determine whether a particular municipality is economically and efficiently managed, we must have access to the reports of other municipalities. But these reports are valueless unless they are based upon similar units of measurement. We can all have most admirable systems of bookkeeping, systems that will religiously account for every dollar received and expended and for what purpose, but reports issued thereon, while accurate, may be absolutely valueless for purposes of comparison. To illustrate—Not long ago I desired to obtain comparative statistics as to the cost of street sprinkling in certain cities. The sums actually expended by those cities were promptly obtained, together with the mileage of street watered, but comparisons were impossible because some streets were sprinkled two or three times a day, others but once, widths of streets were different, and there was an absence of a common unit upon which a measurement of cost could be made. The proper unit would possibly be: The cost of applying a thousand gallons of water to the streets. The quantity of water used in this case was absent, so no intelligent comparisons could be made. Thus we can see that it is essential, in ascertaining the relative efficiency of our municipal governments, that some uniform system of reporting municipal statistics be prescribed by some

competent authority.

The advantage of having at hand statistics from all municipalities ought to be apparent to all. As a means of locating leaks in the management of any department of a city, it would be invaluable. For example: Supposing the cost of street sprinkling could be ascertained by its cost per 1000 gallons applied. The city showing the highest cost would naturally investigate to ascertain the reason therefor. It might be found that there was an overcharge for water, that the hydrants for supplying water were not conveniently located, or that the driver of the wagons wasted time, or that proper reports had not been made. In any event, the application of a remedy would be an easy matter.

So in every department the city showing the highest cost would seek the cause and endeavor to show a more favorable report the next year. In that way, efficiency would be increased all along the line.

Applied to the application of public utilities, in which forty of our cities are now engaged, by having full and complete statistics we could refute the charge now so commonly made, that municipal management is extravagant and wasteful. For one, I do not believe that such charges are true. I believe that municipal operation is not only more efficient, but also cheaper than private operation. We can prove whether this be so or not by having complete data compiled on a uniform basis. If it be true that municipal ownership is better and cheaper, the public should know it; likewise if the opposite be true. If municipal reports are properly made, and we establish the cost of operating our public utilities, we can force the private corporations to make like reports or "shut up." If we can then compel them to make like reports we will have done what we have been trying to force them to do for a long, long time.

Having shown the desirability of having uniform reports and published stat-



istics, the more material matter to discuss is, how should we proceed to get them.

Some say that we should have first a uniform bookkeeping system, and from a uniform bookkeeping system we would necessarily get uniform reports. To proceed first to get a uniform bookkeeping system, seems to me like moving along the lines of greatest resistance. We find an infinite variety of systems, and each book-keeper knows only that system; he is adverse to making radical changes; he is loath to close his books and learn an entirely new system. Besides, he thinks his system is the one best adapted to suit his local conditions. It would be difficult to introduce a uniform system.

On the other hand, by starting in the direction of requiring uniform reports, the deficiencies of a particular bookkeeping system would be at once pointed out, and such deficiencies as appear would be easily corrected without revolutionizing the entire system! Ultimately a measure of uniformity would be secured, and at the same time there would be enough differences to cause a general improvement. Absolute uniformity is not altogether to be desired, because improvement would be retarded. An improved method could not be adopted unless all adopted it. Otherwise, by leaving methods to be adopted by each individual accountant, occasionally some inventive genius among them would announce a better method, which, should experience demonstrate its value, would be naturally adopted by all.

But now, how shall we get uniform reports. Clearly there must be some central authority to prescribe the necessary forms and exact a compliance thereto. Shall that central authority be the State? Many eminent writers on municipal topics have advocated the creation of a State Officer or Bureau with authority to prescribe a system of municipal book-keeping, and to exact reports from city authorities. For several years the State of Wyoming has had a State exam-

iner of public accounts, and recently the State of Ohio enacted a law establishing a similar office, the auditor of the state being the official head of the new department. The legislature of the State of Illinois passed a similar measure, but the bill was vetoed by the Governor.

This is the extent that the State has been called upon to supervise and regulate the manner of keeping municipal accounts. While the favorable operation of the law in Wyoming has been reported, yet nothing in the shape of published reports of this state official has come to me, and I should like to inspect the statistics issued by the State Examiner before passing judgment upon the efficiency of his work. The Ohio law has not been on the Statute books sufficiently long to demonstrate its utility.

In this connection, I have noted that the several writers who are most emphatic in their demands for a state audit of municipal accounts, also with equal vehemence demand home rule for cities. It seems to me that they are inconsistent. Why state supervision of municipal accounts, if home rule, in all other municipal affairs is such a desideratum? Has the state shown any peculiar fitness in administering the affairs of its municipal corporations? Is it not a fact that its relations with its children, the cities, have been anything but parental? Many and severe have been the indictments framed against the state for its treatment of the municipalities and for its unnecessary and costly (to them) interference in their local affairs.

Would not a creation of a state board or officer, vested with authority to supervise its accounts, result in the repetition of the experience that we have already had? Could we, in the light of our past knowledge, have the temerity to predict otherwise than that such a state department would be utterly inefficient and at the same time entail a heavy expense upon the taxpayers of the municipalities.

For one, I am unequivocally against the state's supervision of municipal ac-

counts, believing that a better method can be found for securing the same ends.

I believe that the municipalities of the state, through their officials, have intelligence enough and wisdom enough to provide, through united co-operative action, a system of accounting and publication of statistics, accurate and intelligible, that will fully satisfy the public demand for adequate information. That the system need not be costly to institute nor expensive to maintain.

Two years ago we had a committee to investigate this identical subject, and a report was made along the lines herein indicated.

The League Convention recommended the adoption, which was agreed to, of the following resolution:

RESOLVED, that the League of California Municipalities in Convention assembled, commend and endorse the plan for uniform annual reports as detailed by the special committee on municipal accounting.

RESOLVED, That each municipality belonging to the League be requested to adopt and enforce a municipal order substantially as follows:

ORDERED, by the Trustees (or Council) of the City of ———— that the Clerk (or Auditor) cause to be prepared at the close of the present fiscal year and every year thereafter, a report of the financial transactions and operations of this city. That such reports shall conform as nearly as possible to the schedules adopted by the League of California Municipalities; that—copies of such report be printed in pamphlet form for general distribution; that one hundred of such copies be sent to the Secretary of the League of California Municipalities.

The Secretary of this League should distribute these printed reports so that each member of the League will have and can keep on file a report from every other municipality in the State.

While the results of our action at that time have not been great, yet,

something has been accomplished. There has been a great improvement in the character of the reports of many cities. The work of improvement has been commenced, the importance of the subject is being appreciated and we should push on to a successful termination.

Now, to bring the matter down to basis upon which further progress can be made, I make the following suggestion: That the cities belonging to this League, or at least the larger ones, which have the greatest interest in this matter, be requested to instruct their chief accountant (Auditor or Clerk) to attend a convention to be held at San Francisco at an early date, for the sole purpose of devising a uniform set of schedules for public reports, and that they pay the expenses of the person attending, and that the Secretary of the League communicate this desire to the cities indicated. That at least ten cities be represented at such convention in order to validate any proceedings.

In conclusion, I will say that I have endeavored to present this matter in such a way as to show the importance of a uniform system of municipal reports. That there is a public demand for it, which we cannot neglect to heed. I have expressed a want of confidence in the efficiency of the state to supply this need. That I have pointed out a way by which adequate results may be achieved by co-operative effort.

### General Discussion.

Trustee W. H. Turner, of Merced. I concur with the Secretary in his conclusions. I think the matter should be acted upon by this convention. I have no doubt that our cities will be willing to do what is suggested, through their clerks and other officials. It seems to me that it would be well for Mr. Mason to make out a form of adoption, since he is so much better acquainted with the matter in hand than anyone else, and send it to each of the cities and ask



them to make reports accordingly. If we simply talk about it, it will accomplish nothing, while if we adopt that plan, I think it will be carried out.

City Attorney J. M. Frank, of San Leandro. As to the suggestion made by our Secretary with reference to a convention of clerks, I have some doubt whether it would be properly attended. It appears to me that if every city in the State would officially adopt a resolution instructing its clerk to send out its reports upon a form set out by the Secretary, or by a committee appointed to prepare such form, that would be a beginning towards the end, and eventually, perhaps at our next convention, or the one after, we might have established a proper system. Official action by each municipality seems to me the only effective thing. If we ask municipalities to voluntarily send in their reports, probably two-thirds of them will not do so.

City Attorney G. R. Kennedy, of Chico. I agree with the remarks just made, but in addition I would suggest that resolutions are of very little value, while an ordinance is effective. If each city were to pass an ordinance prescribing it as the duty of the City Clerk, or whatever officer had the matter in charge, to make such a report, it would be complied with. A resolution is introduced, spread on the minutes, and often dies there.

Mr. Turner. It was my idea, Mr. Chairman, that this League should take official action to begin with, so that the different municipalities of the state should know that it is the wish, really the law, of the League, that they make these reports. I have no doubt that every member of the League will send in the proper report at the proper time.

The President. It seems to me that the member of the League representing each municipality should have interest enough in it to take it up before the proper officials of his municipality and have it acted upon. It would, in fact,

be his duty as a member of the League to do so.

Mr. Frank. And likewise, adopting the suggestion of the gentleman from Chico, it would be his duty to prepare an ordinance for the council to adopt.

Clerk Alfred Davis of Santa Barbara. I fully concur with what has been said upon the subject. I have been Clerk of Santa Barbara for some years, and have always made an annual report. We have no ordinance to that effect, and I cannot say that I am in favor of making any law or ordinance that a City Clerk shall keep his books according to a certain system, though I do believe that we should have full reports. A reason suggests itself to me why it would be impracticable to have a uniform system. For instance, Santa Barbara has fourteen different funds to take care of, and for ten of those fourteen funds there is a special tax levy. Another city might have only two or three funds to take care of, or everything may be paid out of a general fund. Hence it seems to me it would be impossible to make the bookkeeping uniform. But as to the matter of sending in reports to this League, I think that if the account that was asked from the different Clerks was not too complicated, it would be made.

Secretary Mason. It is very well, Mr. President, to suggest that the Secretary get up a form for making reports, but I do not think there is any one man in the state wise enough to get together all by himself and prescribe what shall be the proper schedule for all of the cities. I certainly would not want to undertake the job at all. I would not get at anything that would be satisfactory, and would be very severely criticized by probably every city auditor with whom I had communicated. My idea in suggesting the calling together of the chief accountants of a number of the principal cities of the State, those who have made a specialty of municipal accounting, was to have

experts give their united wisdom in the preparation of a schedule, thus giving it more weight and producing a better result. In that way you would at once have perhaps a dozen or fifteen of the cities agreed upon the schedule or plan adopted, and they would go home and make out their reports in accordance therewith at the end of the year. Perhaps Mr. Thomas of Berkeley can give us an idea.

Clerk Charles E. Thomas, of Berkeley. It is my opinion, Mr. President, that boards of trustees will not do much in this matter; that the action must come from the auditors or clerks. I think the average clerk will take a great deal of interest in it. So far as Berkeley is concerned, we are at present able to make a comparative report for the last six or seven years. What we can do in that way in Berkeley is just what you would like to do with all of the municipalities in the State. Under the systematic methods of my predecessor, who held office for four or five years, we have had a thorough and systematic segregation which enables us to determine what has been the cost of any single item during that time. It really seems to me that it is not a difficult matter to get up a proper kind of report or proper kind of form. Some cities of course have expenditures different in character from those of others. If you take the largest city, San Francisco, and adopt a form that will fill the wants of her city government, that ought to suffice for all of the smaller cities. I, for one, would be very glad to have some comparative figures. The value of such figures is at once apparent. If fault is found with a municipality, as is often done by the press, a comparison of amounts paid for the service complained of would show whether the fault really existed. If it did, it could be corrected; if it did not, the charge could be easily refuted. I can assure you that the auditor of the Town of Berkeley will be present at the con-

vention, if you have one, and that Berkeley will always be glad to cooperate in anything of that kind.

Clerk Ed Tedford of Santa Ana. I am very much in favor of the establishment of some uniform rule of making reports. Our Board requires us to make monthly, quarterly and annual reports, and I am sure it will be very valuable to us to have reports upon some uniform rule of making reports. Our Board requires me to make monthly, quarterly and annual reports, and I am sure it would be very valuable to us to have reports upon some uniform system from the other towns.

The matter was then passed, with the understanding that the Secretary should draft a resolution and present to the convention at a later time upon the subject. When the convention met on Friday morning, the following resolution was, in accordance with such suggestion, presented and upon motion of Mr. Crumpton, seconded by Trustee C. D. Johnson of Santa Rosa, unanimously carried:

"Resolved: That this League favors the institution of a system of public reports and the compilation of municipal statistics upon schedules prepared by some central authority, over which this League shall have supervision; that all cities having over 5000 inhabitants within the state be requested to send their chief accountants to a convention, to be held at a convenient time and place, for the purpose of designing a set of schedule for all municipalities upon which to make public reports; and that the Secretary be instructed to take the proper steps to carry out the purposes expressed in this resolution."

#### SHOULD THERE BE AMENDMENTS TO THE LAWS GOVERNING THE DISPOSAL OF FRANCHISES?

The President. In the absence of City Attorney W. B. Matthews, of our city of Los Angeles, who is, I am sorry to say, unable to be present, I will give



you some account of what has come under my observation in the city of Los Angeles upon this subject, and tell you how this Broughton law came into existence and why it is today in existence. The Broughton law does not affect small municipalities; it was designed to be used in larger cities, where franchises have become valuable. The law was drawn up by a corporation attorney in the city of Los Angeles, and submitted to the legislature by Assemblyman Broughton of Pomona. He never had the ability to formulate such a bill, and has never had the influence to get back to the Legislature since the passage of the bill. The measure was gotten up in the interest of the Los Angeles Railway Company—a Huntington and Hellman scheme. We had then, as we have now, but one competing street car system in Los Angeles, and, through this bill, it was expected that the Huntington Company would get a franchise virtually covering the whole city, and so shut out the other company—paralleling their lines. After the adoption of the bill, which provides that a franchise for any public utility, when desired by any person or company, shall be advertised for sale by the Council, upon application made therefor, the Huntington Company made their application, and bids were made and a day was fixed for their opening in the council chamber. It is provided that as many persons may bid as desire to do so, and when the bids are opened, the highest or successful bidder's bid may be raised ten per cent by anyone, after which raise the franchise is put up and auctioned off, and of course the syndicate or corporation with the most money will be successful in getting the privilege. When the bids were opened it was found that there was a bid of \$25,000 by the Huntington-Hellman syndicate, and a bid of \$35,000 by the opposition company. Then there was a bid by a person named Davis for \$139,000, and still another under the

name of Murray at \$415,000. Under the law, the award of the franchise had to be made to the party who bid \$415,000, unless it was raised, and if such party failed to deposit a certain percentage of the amount bid within 24 hours, the law provides that it shall go to the next highest bidder. The Council of Los Angeles awarded the franchise to Mr. Murray for \$415,000, and adjourned to meet 24 hours thereafter. Mr. Murray was a fictitious person. Then the question came up on the Davis bid, the next highest one. Mr. Davis was also a fictitious person—the bid was a bid of the opposition company. The majority of the Council were with the Huntington people, and they seemed determined to award the franchise to that company. Upon Mr. Murray's failing to appear, a member of the Council who had had instructions—for they had gone to work to get all the legal talent in Los Angeles when they had found themselves outwitted for the moment by the opposition company—introduced a resolution declaring him a fraudulent bidder, and that his bid be thrown out. Then the motion was made that it be awarded to the next highest bidder, whereupon the Huntington Company's attorney raised the bid ten per cent, making it \$152,000. The City Attorney decided that it was his right to do that, and, to make a long story short, the franchise was awarded to the Huntington people for \$152,000. The franchise carried with it a freight privilege and a third rail privilege, and gave them 13 miles of the streets of Los Angeles, and every privilege that is possessed by any steam road in California today, except that electric power must be used, and as to that, we are all aware that they are now constructing electric engines just as powerful as our present steam engines. Mr. Ripley of the Santa Fe Railroad Company, told me that that franchise was easily worth a million dollars. Six members of the Council voted in favor of it, but it was

not approved by the Mayor, and went back to the Council. By that time the people of the City of Los Angeles had become so indignant over the matter that the Council sustained the veto. Thereupon the Huntington people took the matter into the courts, and only a short time ago Judge Wellborn rendered a decision holding that they had no valid rights whatever, and upon the proposition that the Council exceeded its rights under the law when it did not accept the Davis bid; that at the time the Murray bid was declared null and void, then, in order to have conducted the matter legally, they should have accepted the Davis bid at \$139,000. And that would have been the price obtained for a franchise worth one million dollars, if it had been passed by the Council and approved by the Mayor. I am satisfied in my own mind that the Broughton Bill is a vicious one, and should be amended or killed at the next Legislature.

Trustee Frank Ey, of Santa Ana. If your City Council had at that time accepted the Davis bid, from what you have since learned through your experience there, in your opinion would the court have taken the same position, or would it have sustained the action of the six Councilmen?

The President. The question of whether or not the Mayor has any veto power under the Broughton Act was raised, the Huntington people contending that he had no such power, as his act would be merely ministerial. Judge Welborn, however, decided the case upon the first point, not reaching the question of the Mayor's veto power at all. I am satisfied, personally, however, that, so far as the City of Los Angeles is concerned, operating, as she does, under her own organic law, even the Legislature could not deprive the Mayor of the veto power upon any ordinance, and I have come to that conclusion after taking the opinion of some of our very best lawyers in the State.

Trustee C. W. Armstrong, of Calistoga. I would like to ask why none of the succeeding parties obtained the franchise?

The President. Because the man with the \$139,000 bid brought the money in and put it down on the secretary's desk, and said he was ready to take it, and demanded it. But the Huntington people immediately raised it to ten per cent. The Traction Company claimed that to be illegal and would not raise the \$152,000 bid, and therefore the Council, being favorable to the Huntington people, granting them the franchise. The latter bid was declared illegal by the courts, so there is no franchise existing, and the matter is just as if nothing had ever been done.

Mr. Ey. Why could not the Davis people come in and demand the franchise?

The President. Because it was not awarded to them. From what I learn from different parts of the State, I will say that, though the Huntington people have appealed from Judge Welborn's decision, their intention seems to be to find another Mr. Broughton and have another bill introduced that will settle the whole matter in their interest.

Secretary Mason. Was the question of the constitutionality of the Broughton Act brought up in your suit?

The President. It was brought in question, but it was not decided in our court. There were a dozen questions raised, but the court decided the case upon the first one, that the Council had no right to accept the additional bids upon the second day.

Mr. Ey. I want to say to the members of this Convention that if it had not been for the man who now occupies your chair, the city of Los Angeles would have been robbed as indicated by his remarks upon the subject a little while ago. I think it is everyone's duty in general to see that no such vicious legislative enactments as the



Broughton Act are passed, whereby the cities are deprived of their rights. And I think it is a good omen that the people of Los Angeles have returned Mayor Snyder to the Mayor's chair in that city by a handsome plurality, as an endorsement of that view. I am glad that the people of Los Angeles, regardless of politics, have a man in whom they can put their trust. (Applause.)

Mayor George E. Catts of Stockton. I think we are all agreed that this law is a very bad one. It was drawn in the first place to fit certain conditions in Los Angeles and San Francisco. But cities of the size of Stockton are liable to find themselves in the same predicament, as Stockton has in fact recently done. There is an additional point: a local company could pick out a certain route over which to get a franchise, beginning at a point, for instance, tapping their line, and running in a direction which they wished to cover, but which franchise would not benefit any other company, either an existing competing company or a new company. In our case, a corporation applied for a franchise covering streets in a certain way that would be of no particular benefit to the corporation already having a street railway in Stockton. The new company bid \$300 for a franchise that was worth at least fifty times as much, if put under somewhat different conditions, and the City Council, having advertised for these bids, was obliged to let them have it at the sum mentioned. It is a bad law. We all know it is a bad law. I think this League ought to pass resolutions asking that that law, and such other laws as we are against, be amended or repealed by the next Legislature. I think the League ought to go further and ask every City Council among the League cities to pass resolutions instructing their local Senators and Assemblymen to attend to this matter. And if it is in order, Mr. President, I move you have the Secretary draft a resolution to be voted upon by this

League, asking for the unconditional repeal of that law.

Mr. Ey. I rise to second the motion, and I have a like reason to that of our friend Catts. We advertised a franchise, and the old company had no use for it, so that the new company bid it in for \$300, though I was informed confidentially that they had twenty-dollar pieces to the amount of \$5000 stacked up and waiting to bid it for that franchise. And yet we were obliged to let them have it for \$300!

Trustee W. A. Trafton, of Watsonville. Watsonville has had a like experience. An electric light company wanted a privilege, and we advertised it, and were obliged to knock down that franchise for \$10. It was a new company, but immediately the old company met together and the franchise was sold out to them, and we got \$10 for our trouble.

Mr. Partridge, of San Jose. If the motion made is carried, what is to prevent the six Councilmen in Los Angeles from granting this identical franchise to whoever they please, without any advertising, and without any compensation at all?

The President. Because under the old law they were not obliged to accept a bid at all, whereas under the conditions mentioned by the gentlemen here, under the the Broughton Act, after advertising, they had no discretion in the matter. Of course, the Trustees of San Jose might dispose of this building today for a very inadequate sum, but the indignant people of the city would rise up and tar and feather them, and put them out of town, and that is a wholesome restraint.

Mr. Partridge. It seems to me that the law might be amended so as to preserve some of its good features, instead of repealing it absolutely, and that is my suggestion.

City Attorney R. F. Robertson, of Los Gatos. We have this very matter under consideration in Los Gatos at the

present time, and I have made a special study of the Broughton Act. It is to be found at page 265 of the Statutes of 1901. I think the substitution of one word would effect the desired result. The Act says that the Council "must" sell to the highest bidder, or to the next succeeding highest bidder, after the proceedings prescribed have been taken. If it were left optional with the Council, as it would be by substituting the word "may," that might answer. I do not think the Councilmen should be compelled to accept the highest or any other bid, and personally I think it would be more effective. It strikes me now that the better way is, and I therefore move it as a substitute of this motion, to have it referred to a committee, and have that committee report upon it, because I think that would be more effective than to have a sort of shotgun proposition from the whole League.

Mayor Frank P. Frary, of San Diego. I second the motion.

The Secretary. I think the substitute motion is a good one. This is one of the most important subjects that we have before us at this convention. We know the influences that were behind the Broughton Act, and possibly the same influences still exist and may obtain at the next Legislature, so that this League may be powerless to prevent their action. At the same time, I think we ought to definitely state our position, so that the public at large may understand just where we stand and also know what are the workings of the powers that are in favor of this law. I am not quite satisfied whether or not it would be wise to absolutely repeal the law. I think the whole subject had better be referred to a committee, with the understanding that they report back to this Convention.

Upon a division being called for, the substitute was declared passed by a vote of 27 to 16, and the Chairman thereupon appointed as such committee Attorney R. F. Robertson, of Los Gatos,

Mayor George E. Catts of Stockton, Attorney F. B. Brown, of San Jose, and Mayor L. O. Stephens, of Fresno.

*Should there be a law regulating the nomination of candidates for municipal offices by what is known as the direct or referendum system?*

The Secretary. I desire to state that this topic was put upon our program at the suggestion of some San Diegans, notably one of the members of the Council, Mr. Ecker. He stated that they had become greatly interested in some articles on the subject published in the magazine "Municipalities," and thought it was an important proposition to have considered by the League. The opening of the discussion was assigned to Mr. Ecker, who is sick and unable to be present, but Mayor Frary has his paper, and will read it to the League.

Hon. M. P. Snyder, President of the League of California Municipalities, and Gentlemen of the Convention:

I regret very much that I will not be able to attend the present Convention of the League. I am grateful however, in having assigned to me the subject of nominations of candidates for office by "direct" vote of the people. To my mind it is above and beyond all other municipal questions. It effects directly the good government of every city in the state. The question bears upon all matters in which the citizen is directly concerned.

It will give to every man the right to have his choice counted for the men whom he wishes to have administer the affairs of his city.

It approaches the nearest to popular elections, the bulwark of our national safety. Primary elections we cannot abolish, we will always have them. If so, then let us have them to express in the fullest sense the will of the people.

The present primary election laws—are intended to answer all needs—of the voter. But when we pause for a



moment and review the past—we can all see many instances where delegates to conventions were hindered and even prevented—in carrying out the wishes of those who elected them, or even their own wishes. If the present primary law is to remain unchanged I would suggest that Section 53 of the Penal Code be amended, so as to include non-interference with delegates to any convention. No one has a right to interfere with a delegate—more than a voter.

Nominations by the present method need not be entirely abolished, but the alternative should be allowed the Central Committees of Cities and of Counties, to adopt or pursue either course. The nominations by direct vote of the people can be no mistake, no more so than popular elections. By allowing nominations to be made directly by the people, the responsibility is placed where it belongs. If the people make a mistake, and nominate the wrong man, no one is to blame but themselves.

It has been my experience that by the present method, and the way that Conventions are conducted candidates are often nominated, that could not be nominated by a direct vote. It also happens that men are nominated that the people do not like to support. Hence the expression "between the two evils choose the least."

Men with corrupt traits often obtain control of ten or twenty delegates out of a hundred, and thus dictate to the conventions who shall be nominated. It is what is commonly called the "work of a boss." I believe in a leader, but not to the extent that he should interfere with any conventions work.

We tried the direct vote of the people, in making a choice for a candidate for Congress in San Diego County this year. There were three men asking the support of voters, it was settled by the people at the primaries, and when the vote was counted all good naturedly *acquiesced in the result*. And good feeling prevails. When the people speak,

the officer seeker heeds, for there is nothing else to do. It is truly American, and the result of the American rule of action.

The will of the people takes the place of "boss rule." If there is any objection to this plan we will see from what source it comes

This matter of changing the primary election laws, will in all probability come before the next Legislature.

The Supreme Court has been called upon to construe the Australian ballot law, and that likely will be amended also.

I hope that our organization will be on the ground to aid in bringing about these needed reforms. I started in to investigate the efforts that are being made in this respect, in other States, but the reports have not come to hand yet. If nothing more can be done than to amend Section 53 of the Penal Code as herein above indicated, or pass a new section, it might answer the purpose to some extent. Preserve the purity of elections. Yours very truly,

W. H. C. ECKER.

Trustee J. L. McFarland, of Riverside. In the city I represent, all of our city officers are put on the ticket by petition, and they are elected regardless of party. In fact, we have no city conventions at all—have not had a municipal convention for six years.

Clerk Alfred Davis, of Santa Barbara. The same condition exists in Santa Barbara. At one time one of our parties tried to have a convention and put up a ticket. It was the Republican party, and, although Santa Barbara has a large majority of Republicans, there was not a Republican elected at that election. It has not been tried since.

Mayor O. L. Clark, of Chico. The same condition exists with us. We have no party nominations, and no city conventions are held at all, and no primary elections. A man's name goes on the ticket by petition only.

Trustee W. J. Morgan, of Auburn. The same conditions exist with us in Auburn.

Trustee Dr. C. W. Chapman, of Nevada City. The same is true with us in Nevada City. All names that go upon the ballot are put on by petition, and I will say that I don't think we could have anything more satisfactory than the way in which our elections in Nevada City are conducted.

Mr. Ey. I believe the same thing exists in Santa Ana. In my own case, I did not know that my name was to be used until I was informed that a petition had been circulated for me.

Clerk A. T. Lightner, of Bakersfield. In our town we have never had any municipal conventions. Our nominees have always gone on the ballot by petition.

Mr. Kennedy. Chico has never had anything but the petition system, and we are perfectly satisfied with it.

Mr. Turner. That is the way we do things in Merced, too.

The President. It would seem that there are only two or three cities in the State that make municipal nominations.

The Secretary. I believe I can give you a list of the cities that do make party nominations. They are San Francisco, Los Angeles, Oakland, San Diego, Stockton, Sacramento usually, although they have a good many independents running there, Visalia, Ukiah, Vallejo, Santa Rosa, Fresno, and I believe Benicia. I think that comprises nearly all of the municipalities in the State having party nominations in municipal elections. San Jose has a very peculiar provision in its charter. It absolutely prohibits party nominations, that is to say, no party designation is made on the official ballot. That seems to me to solve the question of party nominations entirely. Of course a person may be nominated by a Republican municipal convention, but he is not known as a Republican, or under any

other name than as an Independent, on the ballot. As a consequence, I believe they have not had party nominations here for several years. It is within the power of the people of every charter city to copy that provision, and it seems to me an excellent idea. And the charter cities are now in a position to make such an amendment without appealing to the Legislature. In fact, the tendency is more and more in the direction of eliminating partisan considerations in the selection of municipal officers. I remember an instance of a little town not far from here where they would do party politics in a local election. So one of the old parties nominated a ticket, thinking they would get the patronage to dispense. The other side opposed the idea and placed independent candidates in the field, and the result was that not a single party man was elected. It has never been tried again since that time, you may be sure. I think if we let the various cities work out their own salvation in this respect, the result will be eventually an entire want of partisanship in municipal affairs.

Trustee W. O. Dresser, of Paso Robles. While we have never had partisan politics in Paso Robles, yet our candidates have been under the impression that they had to claim some ticket, and hence they would be placed on the ticket as of an Independent Party or People's Party or Citizen's Party, always getting a name that cut no figure whatever really, selecting a party name, perhaps, after they were nominated. Their idea in doing this was simply to comply with what they thought was the law.

*Should Boards of Trustees of sixth class cities be given power to appoint administrative officers?*

The President. The discussion of this topic will be opened by Mr. C. N. Kirkbride, City Attorney of San Mateo.

Mr. Kirkbride. I was put down to open this matter, I presume, rather be-



cause I have attended some of the previous conventions of the League and am somewhat familiar with the subject for discussion, than because I have a technical knowledge of the subject or am especially interested in it. I will therefore simply refer somewhat to the way in which this matter has been discussed at previous conventions.

At the first convention of the League, I remember I was requested by our Board of Trustees to endeavor to get a change in the charter of sixth class cities, whereby Boards of Trustees would have authority to appoint their City Marshal. This was particularly because we had a Marshal who was not doing things in accordance with the pleasure of the Board. He considered himself somewhat independent in view of the fact that he had been elected by the people, and the Board did not get such courteous service as they thought they were entitled to. The subject was taken to Sacramento, and the matter of both City Marshals and City Clerks was discussed, some taking one side and some the other. The result was, however, that no legislative action was taken. At a subsequent League convention the matter was again discussed, but the sentiment was not unanimous, and, under our usual custom that where there is any large dissension from the proposition, it is not desirable to consider any measure as the voice of the League, the matter was again dropped.

As I look at the matter, the point is this: Should a Board of Trustees or City Council appoint its administrative officials? The City Marshal of small towns corresponds to the Chief of Police of large cities, though the former is often made Tax Collector and License Collector as well. The duty of a police official is simply to carry out and enforce the laws enacted by the local legislative body. So upon theory it seems to me that the office should be an appointive one. How are you going to enforce any local ordinance except through

your police department? If your police official considers that he is independent of you and does not give you unquestioning service, you cannot enforce the act; and if you cannot enforce it, it becomes a dead letter, and should not be on the statute-book. But while I think that as a police official, he should be appointed, I do not think the same reasoning would apply to him so far as his duties as Tax Collector are concerned, since that is an office that has no special relation with the Board of Trustees. So that if the City Marshal were made an appointive official, it might be wise to have some other officer collect the taxes. It is of course a fundamental proposition that the voters of a city want as much authority upon the question of selecting their officials as possible. But theoretically, and I think practically as well, if their functions be merely administrative, they should be appointed.

With reference to the City Clerk, he is another administrative official, one brought very closely into connection with the City Trustees or Council, since he attends their meetings, takes down their minutes, writes their notices and delivers them, posts any legal notices, and so on. The same argument applies to the City Attorney. He is simply an official to do the order and will of the Council or Board of Trustees, and he should be appointed by the Trustees. The City Attorney is appointed in cities of the sixth class, and I just mention it because it is in line, as is the case of the Superintendent of Streets, now an appointed officer, and as furnishing a parallel for the appointment of Marshal and Clerk. But, while I am decidedly in favor of the appointment of those four officials, I suggest a new alignment with reference to the duties of Tax Collector and Assessor, which duties are now generally fulfilled by some of the officers named. Both Assessor and Tax Collector should be elective officers. The Assessor, for instance, in a sense stands between the

City Trustees and the people. It is to the interest, we will say, of the City Trustees, to raise taxes and to raise assessments, in order to get more money. Therefore they are in a somewhat adverse position with relation to the people of the community, who in a sense want lower taxes and lower assessments. The Assessor should be entirely independent and uninfluenced by any desire to raise the assessment or tax roll. So it appears to me that there should be some arrangement made whereby an official would be elected, say, as Tax Collector and Assessor, one official, leaving Marshal and Clerk to be appointed by the Board. This matter comes up in our larger cities as they adopt charters. The modern rule in charters seems to be to strongly centralize the government, make the Mayor responsible for the good government of the city and give him plenty of power. I think it has been found in practice, however, that it does not always work out as satisfactorily as might be supposed. This is especially so in the case of a bad Mayor, controlled by some clique or combination. In that event you find that your city takes a backward step, going backward a great deal further than it might have done had you had a system of checks and balances, such as prevails in other departments of American government. It seems to me that we must judge of these matters not so much by ideal rules as by the law of averages, and therefore I am disposed to think that a division of power is a good thing. Applying the same doctrine to sixth class cities, you of course have some elective officials. It would seem to me that we should elect our Treasurer, Tax Collector and Assessor, and that the City Clerk, Marshal, Attorney, and Street Superintendent should be appointed.

Mr. Turner. I agree with Mr. Kirkbride, I believe the Marshal and Clerk should both be appointed. Some say

that if we do that, the candidates for those offices, as our Trustees are not paid, would go to work and get their own friends elected as Trustees. That might sometimes be so, but it is my experience that people in the selection of their Trustees look carefully to it to see that they get the best men, men who are competent to attend to the duties of the office. And, as they go upon the ticket by petition, I think it would still be the result if the offices were appointive. Moreover, if the cities are not careful in the selection of their trustees, they ought to suffer. I am heartily in favor of the proposition.

Mr. Ey. Santa Ana is a fifth class city, but perhaps our plan of dealing with the question of assessment, collection of taxes, and the equalization of taxes, might afford a solution of the question, so far as the separation of the duties of assessment and collection of taxes are concerned. Our work in that direction is all done by the County Board of Supervisors, which makes it both economical and in good hands. I believe we are here for the purpose of advocating economy, and that is certainly an economical way. All of this costs us, I believe, about \$175 a year. I think the plan a good one as well as an economical one. It does not satisfy some of the office-holders, of course. With that plan, one of the points that you are now considering would be satisfactorily settled.

Trustee B. Bruck, of St. Helena. I cannot agree with the gentleman who opened the discussion of this proposition, as to the separation of assessment and tax collecting from the Clerk and Marshal, because I think that would make an additional expense without getting any great benefit from it. In the first place, it would entail an additional expense without getting any great benefit from it. In the first place, it would entail an additional officer at an extra expense. The heaviest part of the remuneration of our Marshal is from the col-



lection of taxes. In St. Helena we only pay the Marshal a salary of \$25 a month. It certainly would be impossible to get a good man for that amount of money, if it were not for the percentage he gets from the collection of taxes. Moreover, I think we now get just as good officers by electing our Clerk and Marshal, and a better Board of Trustees, since patronage always leads to people mixing up with municipal affairs who would not otherwise do so. Again, if you appoint either one of those officers, you will have to let him serve his term out, and if you do, he will be just as independent as if he were elected.

Mr. McFarland. Riverside is the largest city in the State operating under a charter of the sixth class; it has 10,006 inhabitants now, but it has preferred to remain a city of the sixth class because of some advantages we think it has under that class of charter. We think it would be far better to follow the plan suggested by Mr. Kirkbridge. Of course there are more things to be considered with us than in a city of 1500 people. But we are clearly convinced that an appointive City Marshal would be far more in harmony with the Board of Trustees than an elective one. Just as an example of the workings of our present system, we have prohibition, ostensibly, in Riverside. We have seven palatial drug stores, with fittings costing all the way from \$5000 to \$10,000; we have an ordinance restricting them. But they have a great deal of political influence, and, while we have as good a Marshal as could be elected under the circumstances, the Board would like to have him carry out the wishes of the people in a certain respect a little further than is done at the present time. If he were an appointive officer, he could be compelled to perform his duty, or a successor be appointed. The same necessity exists with reference to the Clerk. Riverside has done \$100,000 worth of

municipal work during the past year. Unless we have a Clerk who is competent to carry forward such work, there is liable to be not only a large amount of loss, but a great deal of annoyance. So we are convinced that these officers should be appointed.

Mayor D. C. Clark, of Santa Cruz. I am of opinion, especially with reference to the office of Chief of Police or Marshal, that he should be an appointive officer. We have applauded strongly remarks of Mayor Worswick when he said that he hoped to see the day when partisan politics would be taken out of city affairs. With the Chief of Police or Marshal elective, you at once bring in all the elements of politics into your municipal affairs, for the office of Chief of Police is one that appeals to the disorderly element in a town, who will work their best and strongest to elect their own man. It is assumed, on the other hand, that when you elect a Mayor, Board of Trustees, or City Council, that you are going to elect men from among your best citizens, and while that is not always the case, still I think it is a safe assumption, especially where the nominations are made by people upon petition, and not by political convention. The advantage of having our administrative officers appointed was illustrated a short time ago in Santa Cruz, when I had a disagreement with the Board of Health, and I was finally compelled to tell our health officer that if he did not call the Health Board together and take action on the matter, I would appoint a Health Board that would act, and the next morning a meeting of the Health Board was called.

Mr. Thomas. While Berkeley is not a sixth class town, I think perhaps a little experience that we are having will be interesting. It has been presumed so far in the discussion that the Board of Trustees is always all right. I don't think that follows. In Berkeley the City Marshal is elected. We will suppose he was made an appointive

officer with us, where we have, as you know, a law that no liquor shall be sold within one mile of the State University. The very first election, a fight would be made on the Board of Trustees, and we would stand in danger of not getting a good trustee. Moreover, I think that when officers meet together as often as they do in board meetings, and so form close personal and social relationship, the appointive officers are very likely to hold their offices, even though incompetent. Moreover, inasmuch as a member of the Board of Trustees makes no salary at all in his position, when the Trustees are looking for a man to fill one of these appointive positions, they are very likely to take one from their own number. For instance, our present Superintendent of Streets is an ex-member of the Board, who resigned. Suppose I resign as Clerk on January 1st. The City Superintendent will be put into my place, and the Trustee from the third ward will take his place, while the man that the Trustee from the third ward nominates to fill his place, will go into the Board. So there are two sides to this question, even with cities of the fifth and sixth class.

Mr. Turner. I hardly think that we ought to be classed with the larger cities. We know that they are corrupt generally, though I hardly thought a delegate from Berkeley would come here and admit it. It seems to me that delegates from cities of the sixth class ought to have the say upon the question.

Mayor L. O. Stephens of Fresno. In Fresno we appoint our City Attorney, Chief of Police, Chief of the Fire Department, and Street Superintendent, and at any time one of them does not fill the bill, he is removed. We have removed two officers of that kind within the last year, and others have been notified that a similar course will be followed if they do not do their duty. The gentleman from Berkeley says they sometimes promote their Board mem-

bers to these salaried positions. Any one down there who loses or drops out of his office by reason of not being able to fill it, is not qualified to take any other office, and the suggestion occurs to me that it might be a good idea to provide that one who does not fill out his term should be debarred from taking any other place in the government.

The Secretary. I have here a letter bearing upon the subject, which I will read:

"I was chosen by the Board of Trustees of the City of Healdsburg as a delegate to the convention now in session, but, finding it impossible to attend, wish to communicate through you to the proper committee that it is the unanimous sentiment of our Board that the League should urge such legislation as will render the officers of Clerk and Marshal, particularly that of Marshal, appointive. With kindly greetings and best wishes for the success of the convention; I am, yours very truly, J. T. Coffman."

To bring this matter to a head, I suggest that the roll be called of cities of the sixth class, as this proposition affects them individually.

Acting upon the suggestion, as well as a motion to that effect, the question was divided, and a vote taken separately upon Marshal and Clerk, with the following result: That the Marshal should be an appointive office, 14 for; 5 against. That the Clerk to the City Council should be an appointive office, 9 for and 11 against.

The roll call on the proposition to appoint the Marshal was as follows:

Yes—Riverside, San Leandro, Auburn, Merced, Sonora, Los Gatos, Redwood City, Sausalito, Livermore, Paso Robles, Vacaville, Winters, Calistoga, Mountain View.

No—St. Helena, Pacific Grove, Yreka, Suisun, Redlands.

Upon motion of Mr. Lightner, duly seconded, the Secretary was instructed to correspond with officials of cities of



the fifth class to ascertain whether they desired to be included in the bill to be presented to the Legislature upon the subject.

### **The Disposal of Garbage.**

The President. We will now take up the matter of the disposal of garbage, which has been suggested here this morning.

Mr. Turner. We dispose of our garbage by dumping it into the river a mile out of town, and burning it. I think that is about as good a way as any.

Mr. Stephens. We used to haul our garbage out into the country and dump it. Finally the Supervisors told us that we must keep inside the city limits. So last year we built a furnace, and now we have our garbage gathered up and taken to the furnace, and we have a man there who takes charge of it and burns it up. We are going to make it self-sustaining during the next year, though we have paid the man this last year. He has been kept pretty busy, as he burns about 20 loads a day. We think next year we will charge about 25 cents a load for wet garbage, and about half that for garbage that is dry. We expect to add about \$1000 in improvements to our furnace, and then we will have a first rate crematory. The point is that when that is taken to the crematory to be burnt up, he must pay for it at the rate specified. During the past year we have burned our dead animals at the same place, using an oil burner for fuel.

Mr. Turner. How much was the expense during the year?

Mr. Stephens. The expense was about \$1500. We burn about 20 loads a day, besides burning the dead animals.

Mr. Turner. Could you burn more than that?

Mr. Stephens. We could, certainly.

The President. What is the name of

your crematory? Is it a patented one?

Mr. Stephens. No. It is simply the Fresno crematory.

The President. I asked the question because there are about a thousand of them in the country that are patented, and Los Angeles pays a good round sum for using hers.

Mr. Stephens. It is merely a big furnace, and that is all, just as you would make if you were going to heat water—a fireplace.

The President. Does it consume all the garbage?

Mr. Stephens. Oh, yes. Of course it does not burn metal.

The Secretary. Do you make any attempt at separating your garbage before it is taken out there? You have a dump for tin cans and crockery, and things of that kind?

Mr. Stephens. Yes. Our man over there takes out all such things as bottles and other non-combustibles.

The President. I do not understand just how you gather the garbage.

Mr. Stephens. I do not understand just how you gather the garbage.

Mr. Stephens. It is collected by scavengers, and they collect from the people from whom they haul the garbage away. We simply compel the people to dispose of their garbage, and they hire the scavengers. The rate is regulated by competition. As I said, we use oil for burning the animals, but most of the garbage will burn itself.

The President. It is certainly the proper way to dispose of garbage to burn it.

Trustee J. W. Keegan of Santa Rosa. I would like to inquire of Mr. Stephens what the scavengers charge in ordinary households.

Mr. Stephens. My scavenger charges me \$1 a month, and he comes, I think, twice a week, which is about the ordinary rate. Of course, we have competition—I guess a dozen scavengers. They do not take the swill and slops—no man is allowed to do that, to

haul swill and so on through the streets, unless he has a closed vessel to haul it in, and then he must haul it at night, and the man who hauls the slops and swill does not haul anything else.

Mr. Keegan. He also charges, does he?

Mr. Stephens. No. Some of them pay for it, I think. They use the swill for hog feed.

A Delegate. Do you require your citizens to have separate bins in which to put the wet and dry garbage?

Mr. Stephens. Yes.

### **Construction and Repair of Streets.**

The Secretary. There is one matter that ought to be given legislative consideration, in the way of a measure that will correct a recent decision of the Supreme Court in respect to the construction and repair of streets, especially in sixth class cities. I refer to the case of Redonda Beach vs. Cate. The Supreme Court there laid down the proposition that there was no authority of law anywhere on the statute books by which cities of the sixth class could spend any money of the general fund in the original construction, improvement, grading, opening, or widening of streets, or for the repair, even of any street that had been accepted, excepting those that had been first accepted under the terms of the Vrooman Act, and that the only provisions for the maintenance of streets were those provisions which existed in the Vrooman Act. It was a very sweeping decision, and, although I regard it as being very poor law, even if it did come from the Supreme Court, and think there is a very good prospect of getting the Supreme Court to reverse itself; still, I think the more simple way would be to present an amendment to the municipal incorporation Act to the coming Legislature overcoming the defect. A very simple amendment will cure it, and if the convention will instruct the legislative committee to pre-

pare an act on that subject, I think it may be readily passed.

Mr. Frank. I make that as a motion, Mr. Chairman.

Mr. Turner. I second the motion.

The motion was unanimously carried.

Mr. Kirkbride then laid before the convention a proposition for the establishment of a State Library Commission, and Mr. Chas. S. Green of the Oakland City Library, addressed the convention on behalf of the matter. No action was taken.

[NOTE—The remainder of the proceedings of this day and also of the evening session are necessarily omitted this month, but will be given in the January number, which will be issued in about two weeks.]

### **Concluding Proceedings.**

The convention met Friday morning, Vice President W. H. Turner, Presiding.

The committee appointed to suggest the membership of the standing committees reported as follows:

Executive Committee—The President and Secretary, Mayor George E. Catts, Stockton; Mayor George D. Worswick, San Jose and Joseph Hutchinson, Palo Alto.

Judiciary Committee—C. N. Kirkbride, San Mateo; J. N. Frank, San Leandro; F. B. Brown, San Jose; A. Kincaid, Redwood; R. F. Robertson, Los Gatos.

Legislative Committee—G. R. Kennedy, Chico; J. W. Morgan, Auburn; Chas. E. Thomas, Berkeley; Frank Ey, Santa Ana; C. L. McFarland, Riverside.

Engineering Committee—E. L. McCabe, Visalia; E. N. Eager, Suisun; J. Teilman, Fresno; C. E. Moore, Santa Clara; T. N. Badger, Emeryville.

The report was adopted.

[J. W. Keegan of Santa Rosa, delivered an address on Septic Tanks and Assessor Washington Dodge of San Francisco read a paper on the Assessment of Franchises. These papers will be published next month.]



Nominations for officers being in order Frank Roberts of Santa Cruz presented the name of Mayor D. C. Clark, C. N. Kirkbride presented the name of W. H. Turner and R. F. Robertson proposed Mayor Geo. E. Worswick. The roll was called and Mayor Clark of Santa Cruz was elected.

Mayor Geo. D. Worswick of San Jose was chosen First Vice President and Mayor Frank P. Frary, of San Diego, was chosen Second Vice President.

H. A. Mason was re-elected Secretary and the Crocker, Woolworth National Bank, Treasurer.

The names of Stockton, Berkeley, Santa Rosa, Santa Ana, Fresno, and Paso Robles were mentioned as the next meeting place. On the second ballot Stockton was unanimously chosen.

A vote of thanks was tendered the presiding officers for their courtesy and fairness.

On motion a vote of thanks was given to the city of San Jose and the Town of Santa Clara for their hospitable treatment.

At eleven o'clock a. m. the convention adjourned.

Immediately after adjournment the delegates were taken to Alum Rock Park, five miles distant, by the courtesy of the Santa Clara Valley Improvement Club and the managers of the Alum Rock R. R. Co. Here a pleasant hour was spent in viewing the grounds, the public baths and the famous mineral springs that abound there. It was a most delightful trip.

Returning from the park, the delegates were taken directly to Santa Clara where they were received by the town officials and a committee of the Commercial League.

The municipal water works, electric lights and gas works were inspected and admired. All then repaired to the big warehouse of the Cured Fruit Association nearby where tables had been spread for the guests. A section of the building had been set apart as a dining

hall and this had been tastefully decorated with fans and flags and under festoons of bright ribbons and green boughs, long tables were covered with a most tempting array of edibles. A number of pretty Santa Clara young ladies served the dainties. Souvenir cards were at each plate with the following inscribed thereon.

#### MENU.

SHRIMP SALAD     DAINTY CHIPS  
RISOTTO DEL QUITO  
ROAST TURKEY  
CARIGAN - - - EL QUITO  
BAKED HAM  
SWISS CHEESE     FRENCH BREAD  
OLIVES - - - PRUNES  
ICE CREAM     NABISCO WAFERS  
COFFEE  
FRUITS,     CAKES     NUTS  
TOASTS:

Toastmaster, DR. A. E. OSBORNE.

OUR GUESTS,

Response by D. O. Druffel, Pres. Board of Town Trustees, Santa Clara.

THE LEAGUE

Response by the President.

OUR LEGAL DEPARTMENT

Response by C. N. Kirkbride, San Mateo

OUR ENGINEERING PROBLEMS

Response by E. L. McCabe, Visalia

THE PUBLIC HEALTH

Response by Dr. C. W. Chapman, Nevada City.

PUBLIC UTILITIES

Response, by Fred B. Brown, San Jose.

OUR TROUBLES

Response by Mayor F. P. Frary, San Diego.

FORECAST

Response by H. A. Mason, Secretary.

The speeches were wise, witty and appropriate. It is to be regretted that space cannot be given to their reproduction.

The event was certainly a most happy one; one that those present will never forget.

The assemblage finally and regretfully dispersed at four o'clock with cheers for the League and good wishes for the people of Santa Clara.

## What the Cities are Doing

Corona has no saloons now.

A bond issue for a sewer system is proposed at Selma.

Napa will vote on a lot of charter amendments on February 16th.

Redwood City talks of butimized pavements for its principal streets.

Mill Valley proposes to issue bonds for a variety of public improvements.

Santa Rosa may indulge in the luxury of a bond issue for sewers, park, etc.

Kern City has adopted plans for a new city hall and fire department house.

Salinas will vote on the adoption of its freeholders charter on January 12th.

Oakland's special committee on a municipal water supply is expected to report soon.

Suisun may issue bonds for the construction of a new pipe line from the town's water supply.

Berkeley proposes to induce extensive tree planting and may revive the act of 1893 on this subject.

Long Beach will vote on Dec. 30th upon the proposition of issuing \$35,000 bonds for sewer purposes.

Pasadena has let a contract for the construction of a new fire department building to cost nearly \$7,000.

The Library trustees of San Bernardino have selected a design for the new Carnegie Library at that place.

Long Beach is talking of having a freeholders charter. The city claims to have a population of \$4,000.

The corner stone of the new Carnegie Library at Fresno was laid with appropriate ceremonies on December 8th.

J. L. Bates has been appointed City Clerk of Healdsburg in place of C. H. Pond who was elected District Attorney.

Fresno will hold a bond election January 20th for the purpose of raising money to install a septic tank for sewage.

Oakland has just completed a census showing a population of 82,195. The census of 1900 returned a population of 65,000.

Yreka has received \$55,000 as the proceeds of its bond issue and will soon commence the work of installing a municipal water system.

The work of laying an asphalt pavement on the business streets of Palo Alto is nearly completed. It adds much to the appearance of the town.

Vallejo proposes to submit amendments to its charter to the number of thirty-six, and one of them proposes to abolish the Board of Public Works.

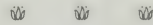
San Bernardino has voted to issue bonds to the amount of \$230,000, the proceeds to be used to purchase a water supply and to improve the system.

San Diego will soon vote on the question of issuing bonds to the amount of a quarter of a million of dollars for a variety of public improvements.

Truxton Beale has tendered a monument to the city of Bakersfield to be dedicated to the memory of his mother. It will be erected near the site of the Beale Public Library.

The voters of Marysville will be called upon shortly to authorize a bond issue for a sewer system. Marsden Manson, of San Francisco, has been appointed engineer for the project.

Engineer C. E. Moore has submitted plans and estimate for Merced's proposed water and light works. The water works will cost \$65,000 and the electric plant \$14,000 if for street lighting and \$30,000 if for both street add commercial lighting. The election will be held soon.



### Newly Elected Officials.

LOS ANGELES—Mayor, M. P. Snyder; Councilmen, Owen McAleer, C. F. Skilling, O. E. Parrish, Theodore Summerland, W. M. Bowen, J. P. Davenport, Edward Kern, J. A. Todd, —Notzieger, Clerk, Harry Leland; Treasurer, W. H. Workman; Attorney, W. B. Mathews; Auditor, F. E. Unger; Tax Collector, E. E. Johnson; Engineer, H. F. Stafford; Street Superintendent, E. R. Werden; Assessor, F. W. Wismer.

GRASS VALLEY—Mayor S. M. Harris; Trustees, T. J. Mitchell, John Pascoe, W. B. Van Orden, A. J. Argall, George Perkins, George Conaway, E. F. Whiting; Marshal, Dan Deeble; Water Collector, John Hicks; Assessor, Richard Williams; Treasurer, W. M. George.

## Removed

PATRICK & CO.,

RUBBER STAMPS & ETC.,

TO

221 Sansome St. Ground Floor,  
Between Pine and California Sts.



# An Economical Street Lamp



The city of Vallejo, Cal., is paying \$8 50 per lamp per month for eighty electric arc street lamps or a total of \$8,000 per year. With the MERIDEN HYDRO-CARBON ARC LIGHT the city of Vallejo could be lighted for \$1,039 for material and allowing for attendance \$1,500, an amount far exceeding what it should cost, would make the cost of lighting \$2,539 per annum, which shows an annual saving of \$5,500, or a sufficient amount to build each year a new school house or go far towards paying the cost of educating the children of that city.



The city of Benicia is paying for fifteen electric arc lamps the sum of \$12 each per month or \$2,160 per year. With the MERIDEN HYDRO-CARBON ARC LIGHT it would cost for material \$200, for attendance \$300, as it will take a man but two hours per day to attend to a plant of this size, making a total cost per year of \$500, a saving of \$1,600 per year and a far better light.



The city of Sonoma pays for twenty-five 32-candle power lamps which give them but 600 candle power per night the sum of \$600 per year. With the MERIDEN HYDRO-CARBON ARC LIGHT they could have ten lamps giving 16,000 candle power per night at a cost of \$130 per year including attendance not over in all \$100 per annum, a saving of \$400 per year and over 15,000 candle power per night.



The company would be glad to give to those interested the names of eastern cities now exclusively using this light, also the names of parties who have factories and stores lighted with this system.

**Meriden Hydro-Carbon Arc Light Co.**  
**OF CALIFORNIA**

819 MARKET STREET

Room 29

SAN FRANCISCO, CAL.

# CALIFORNIA MUNICIPALITIES

VOL. 7.

JANUARY, 1903.

No. 6.



OFFICERS OF THE LEAGUE OF CALIFORNIA MUNICIPALITIES.

MAYOR D. C. CLARK, SANTA CRUZ,  
*President.*

MAYOR GEO. D. WORSWICK, SAN JOSE,  
*First Vice President.*

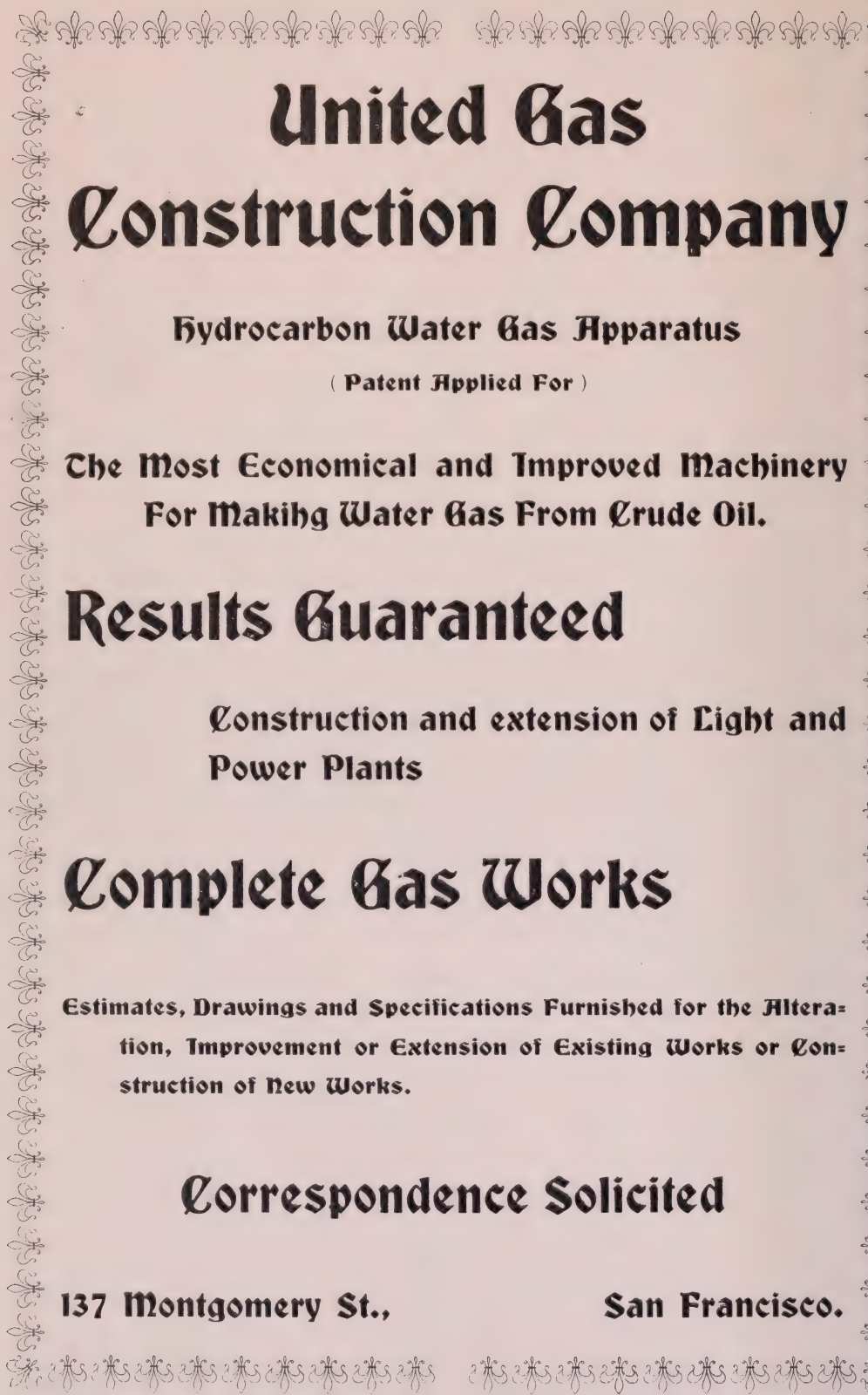
MAYOR FRANK P. FRARY, SAN DIEGO,  
*Second Vice President.*

SAN FRANCISCO OFFICE . . . . .  
ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.





# **United Gas Construction Company**

**Hydrocarbon Water Gas Apparatus**

**( Patent Applied For )**

**The Most Economical and Improved Machinery  
For Making Water Gas From Crude Oil.**

**Results Guaranteed**

**Construction and extension of Light and  
Power Plants**

**Complete Gas Works**

**Estimates, Drawings and Specifications Furnished for the Altera-  
tion, Improvement or Extension of Existing Works or Con-  
struction of New Works.**

**Correspondence Solicited**

**137 Montgomery St.,**

**San Francisco.**

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 7.

January, 1903.

No. 6

## California Municipalities.

Published Monthly.

H. A. MASON, - - - - - Editor

Office of Publication, - SANTA CLARA, CAL.  
San Francisco Office, Room 14 Eighth Floor, Mills Building.

All persons interested in the study of municipal problems, members of local improvement clubs and other civic organizations, ought to be subscribers to this magazine. It is the only publication of the kind on the Pacific Coast.  
Send for sample copy.

### CONTENTS.

#### EDITORIAL:

Notes .....	179
Bills Before the Legislature .....	180
PROCEEDINGS OF THE FIFTH ANNUAL CONVENTION, Cont'd.....	181
Voting Machines.....	181
The One Year Limit for Municipal Contracts.....	184
Whether Licenses Shall be Collected by City or County.....	187
Cost of Electric Light.....	189
The Granting of Franchises.....	190
The New Street Law.....	192
Roll of Towns.....	193
Franchise for Competing Telephones ....	211
Assessment of Franchises in California....	213
Notes .....	216

Preliminary steps have been taken for the calling of a convention of auditors to formulate schedules for uniform municipal reports. Auditors and clerks have been requested to indicate a convenient time for the meeting.

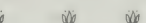


The publication of the proceedings of the recent convention of the league is concluded this month with the exception of Mr. Keegan's talk on septic tanks. This will be given next month and it is to be hoped fully illustrated.



Governor Pardee has recommended that the legislature authorize the school funds to be invested in municipal and school bonds.

In case of financial stringency when bond buyers are shy, such a provision might come in handy.



It is reported that a proposition is to be submitted to the legislature to extend the terms of all officers of cities of the fifth class from two to four years. Why was not this proposition brought before the league convention for discussion? The purpose of the organization is to decide questions of that kind, and it is not treating the cities of the league with proper courtesy to take snap judgment on them and try to get



a law changed without first ascertaining how it will affect the other cities of that class.



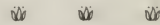
**Bills** The League of California Before the Municipalities has caused Legislature five bills to be presented to the legislature. One, prepared by the Registrar's office in San Francisco is designed to authorize the use of ballot machines. It was introduced by Senator Devlin in the Senate and by Assemblyman ——— in the Assembly.

Another bill is to authorize boards of trustees of the sixth class to expend the municipal revenues in the improvement of streets, by amending section 862 of the municipal incorporation act. The purpose of this amendment is to overcome the effect of the decision of the case of Redondo Beach vs. Cate, which held that no public funds could be expended for that purpose and that bonds for street work could not legally be issued on that account. This bill has been introduced by Senator Savage and Assemblyman Prescott.

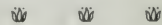
Another bill proposes to repeal the act of 1895 limiting the term of lighting in cities of over 10,000 to one year. It has been introduced by Senator Muentner and Assemblyman Dunlap.

Two other bills are the outcome of a desire on the part of some cities to have the Marshal appointed and on the part of other cities to have the clerk appointed, and will affect cities of the fifth and sixth classes, amending sections 752 and 852 of the municipal incorporation act. It has been framed so as to leave the proposition of appointing these two officers wholly optional with the boards of trustees. They are to be elected as heretofore unless the trustees adopt an ordinance providing for their appoint-

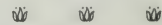
ment. In this way all objections to the election or appointment are overcome and each city can please itself in the matter. No other plan of amending the law could be suggested that did not meet with more or less objection. These bills have been introduced by Senator Belshaw and Assemblyman Black.



The citizens committee appointed by Mayor Barstow of Oakland to investigate and report upon the practicability and advisability of a municipal water supply for the city has concluded its labors. Its report is favorable to the acquisition of such a system. As the sentiment of the community appears to be likewise favorable and inasmuch as the councilmen have been thought to approve of municipal ownership, it is likely that the proposition will be submitted at an early date.



Fresno will vote on January 20th, upon the question of a bond issue or special tax for a septic tank.



The voters of Redlands have refused to adopt the freeholder's charter submitted for their approval.



Mayor George W. Harney of Marysville proposes that enough money be raised in the bond election to build a City Hall and Library, to erect a high school and to purchase water works.



Gilroy has sold its bonds recently issued for the purchase of the local gas works and the formal transfer will be made this month. This will be the second municipal gas works in the state.

— PROCEEDINGS OF THE —

# Fifth Annual Convention

— OF THE —

LEAGUE OF CALIFORNIA MUNICIPALITIES.

*Continued from the December Number.*

## SHOULD A LAW BE SUBMITTED GOVERNING THE USE OF VOTING MACHINES.

The President announced that the next subject for discussion would be the submission of a law governing the use of ballot machines, and a recess of fifteen minutes was taken to permit the delegates to inspect and listen to an explanation by the inventor of H. A. Clifford's patent voting machine, after which the Secretary read the following paper by Thomas J. Walsh, Registrar of Voters of the City and County of San Francisco:

### Voting Machines.

The principle underlying our Republic—that all governments derive their just powers from the consent of the governed—naturally presupposes that such consent be not merely honestly obtained, but also reflect the genuine sentiment of the citizenship. Thus the electoral franchise or suffrage has been conferred in constitutional governments upon their citizens, more or less restricted by qualifications and conditions dependent in a large measure upon the advanced democratic sentiment of the people affected.

I think it will be conceded that as a general proposition the citizens of these United States enjoy the largest measure of universal suffrage. In consideration of the fact that we are presumed to be the most advanced Government that ever existed on earth, and consistent with the principle that good Governments derive their just powers from the

consent of the governed, it seems quite proper that here more than anywhere else, suffrage should be universal.

But the mere fact that the electoral franchise is general, is no evidence that it is honestly exercised, or if so, that it reflects the true sentiment of the electors. Serious as this implied charge may be, it is not intended to criticize the corrupt or dishonest practices by which results have been purchased—but rather to confine ourselves to the defects of the present system of voting, which defects cause results as detrimental as if criminal effort had been made to prevent the people's will. To remedy an evil so manifestly dangerous to our political and social life, has been the concern of honest and patriotic citizens of our common country for many years.

The progress of electoral reform has been slow, but yet no one will deny that we have made some progress. Prior to the adoption of the Australian Ballot Law, the secrecy of the ballot had become a farce, and unscrupulous manipulators took advantage of the laxity of the system to purchase or intimidate voters, in flagrant violation of every moral obligation of pure and honest citizenship. The adoption of the Australian Ballot Law secured the secrecy of the vote, and to a very large extent prevented the intimidation and corruption of voters, but experience proves that superior though it be to the former methods, it is still crude and defective in important essentials.



By far what may be considered the most serious defect in our present ballot law is the great number of ineffective or illegal ballots cast. The Supreme Court of the State has decided that Ballots being stamped other than in a certain way are to be rejected as marked ballots. In a recent election contest in San Francisco more than 5000 votes were thus rejected. Whether these rejections were justified or not, it must be quite clear, that any method by which nearly 10 per cent of the entire vote cast can be made ineffective or void, by reason of some technicalities, is crude and very much in need of improvement. But if we consider that most of all these votes so rejected were honestly cast, but mayhap on account of a little nervousness on the part of the voter, or some slight inattention, stamped in the wrong place, the entire ballot is thrown out, and the intention of that voter thereby entirely ignored.

When we consider that in close elections the rejection of a small percentage of votes may change the policy of an administration, National, State or Municipal, the importance of a just and correct system of voting must be evident to all.

It is hardly necessary in a gathering such as this to dilate upon the shortcomings of our present method of election; the facts are patent to you all; but what is the remedy? Having been Registrar of the City and County of San Francisco for three years, I have had favorable opportunity to study and look over the question. For many years prior I have been more or less interested in the progress of electoral reform, and it is quite natural therefore that I avail myself of the opportunity afforded me in my position for investigation. I was particularly interested in the experiments made in the Eastern states with voting machines, and have been anxious to find out the results. I have studied whatever literature came my way upon this subject,

and have about concluded that the voting machine is the only remedy for our present faulty system of voting.

In order to fully appreciate the advantages of the machine, the faultiness of the present system must be kept in mind.

As far as the experiments show where machines are in use, we find the following points in favor of its use:

- 1st. Absolute secrecy.
- 2nd. No defective vote can be cast, since the machine will not permit it; therefore every vote is made effective.
- 3rd. Each vote is registered with mathematical accuracy, relieving election officers of tedious counting and possible errors in returns.
- 4th. Returns are ready as soon as polls are closed, setting at rest all anxiety as to the result, and discouraging all efforts at manipulation of results.
- 5th. It will avoid all necessity for recounts, and the Court passing upon close and perplexing questions of the legality of markings.
- 6th. It promotes convenience and rapidity of voting, reduces the expense of conducting elections, and removes all opportunity for dishonest practices on the part of voters or Election Officers.

The practical use of the voting machine is no longer an experiment, as they are in successful use in many of the States of the Union.

The State of New York was the first to legalize their use in 1892. Massachusetts and Michigan followed in 1893, and Connecticut in 1895. They are now in active use in fifteen of the States. 120 towns and cities of New York State used the machines at last election.

One of the great advantages of the machine voting is the promptness with which the returns are known. The City of Buffalo is taken as an example of what can be done in ascertaining the results of an election. At the last Presidential election five minutes after the

polls closed the full returns from every precinct were on their way to the City Hall. At half-past five returns from 207 out of the 108 precincts were received and the result known.

The full returns were printed and the papers containing this information were sold on the streets at 7 P. M. The full returns were also telegraphed to both Presidential candidates before 6 P. M. It is instructive to compare this work with that of the year 1896 when it took 8 hours and 30 minutes to finish and file the returns from Buffalo. Voting was exceedingly rapid, varying from 80 to 150 per hour. 45,000 had voted by noon, averaging 416 per precinct.

The first and commonest objection to voting machines is that they foster "straight" voting, and one would expect this objection, if well founded, to be strongly confirmed in a Presidential election, as that is a time when party spirit is supposed to be strongest. But the results in Buffalo in 1900 show that it is entirely without foundation. All but two of the Republican candidates carried the city; but their pluralities varied greatly, as the following examples show: State Controller 5,760 majority; President, 2,912, Governor, 2,090; Lieutenant Governor, 1,692. Further, one Republican candidate for Congress, whose district lies wholly within the city, was defeated, his Democratic opponent receiving a plurality of 380.

It is evident therefor, that when voting machines are used the people both can and do "split" their ballots, just as freely and easily as with paper ballots.

In no place where machine voting has had a fair test is there a doubt that it is the best that has yet been devised. It is fair, rapid, accurate, economical, and as nearly fraud-proof as it is possible for any human device to be.

The first and absolutely necessary step in all reform is to make sure that every election is an honest one—is a real expression of the people's will—and

this the voting machine does without any uncertainty whatever. This feature alone is worth many times the cost of the machines, but it is not their only merit. The name of every candidate nominated appears plainly before the eye of the voter, where he cannot help seeing it, and all candidates are on exactly the same footing, because it is just as easy to move one indicator as another.

On a machine the voter cannot make the mistake which is so frequent under our present ballot, of voting for more candidates for an office than are to be elected. Having voted for the requisite number, the machine is locked against all other candidates for the same office. It would be somewhat difficult to explain the mechanical construction without a specimen, but as far as I can learn they are perfect in their work.

In conclusion I desire to impress on all those who are here, the necessity of using their best endeavor to advance this reform, and to suggest such amendments to the election laws of this State as will encourage the use of the machine at least in all towns and cities of the State. I believe you who are interested in Municipal reform will agree with me that the first and most important step for honest progress and successful municipal administration, is an honest election, and the confidence of the citizens in the officers chosen by them. A cloud upon the title of any officer inducted into office, is destructive of good faith and confidence, and must seriously effect his standing in the community. A lack of confidence in one, more or less hampers all. To insure confidence in those chosen to represent the people, the electors must feel assured that they were honestly chosen. The factor which shall conduce most to this result is the use of the Voting Machine.

THOS. J. WALSH,

Registrar of Voters,

San Francisco, California.

Mr. Catts. Mr. Chairman, did not



the vote on the constitutional amendment leave the matter of the use of voting machines leave the matter directly in the hands of the home government?

The Secretary. The tenor of the amendment voted upon at the last general election merely permits the legislature, contrary to the rule before its passage, to so legislate that the different political subdivisions, the counties and the cities, may choose for themselves whether they will use voting machines, or not. It is not a self-executing proposition. The Legislature must first pass a law, and then the cities and counties may act upon the matter. I will state that I have taken up the matter with the Registrar of San Francisco, and I have framed a bill upon the subject, and have as well copies of the statutes of other states upon the subject. I am somewhat anxious that there should be a committee appointed by this League to look into the matter and present some such bill for passage at the coming session of the Legislature; I want the League to have the credit of it, should such a bill pass.

Mr. Ey. I move that it is the sentiment of this body that a law should be passed by the Legislature of California permitting cities and counties to use a voting machine, and that the matter of drafting a suitable bill for the purpose of presentation be referred to the Legislative committee of this League, with instructions to prepare and submit such a bill to the Legislature.

The motion was duly seconded and unanimously carried.

### **The One-Year Limit for Municipal Contracts.**

Mr. Catts. While we are under this head, Mr. President, I would like to bring before the convention a matter that I was requested to present to the League by a committee of citizens of Stockton who are working as a committee under a charter provision for the

purpose of revising our present city charter and bringing it more up to date. We have a law in California which says that no city shall let a contract for street lighting or public lighting purposes for a period longer than one year. Not only that, but it is provided that the contract shall be let within the six months preceding the beginning of such year. I do not know just what effect that law has had on other communities, but on two or three occasions Stockton has bumped her head very hard against it. For instance, about seven years ago we were paying for street lights \$12.40 a month for arc lights, which made practically \$150 a year for each light, and we had 160 lights, making an annual expenditure of \$24,000 for street lighting purposes. At that time we had an opposition company come into Stockton, of good, responsible men, because they backed up their proposition with a bond of \$100,000, who said to us, "If you will give us this privilege for five years at the present rate, at the end of the fifth year we will turn our plant over to you without one dollar of expense." Three years ago we had another proposition, when we were paying \$8.90 per month per arc light, by a company coming into the town, that if we would make a contract for three years they would cut our bill in half, practically, furnishing us the light for \$5 per month. In my judgment, this law is on the statute books merely for the protection of existing corporations. I believe that when a corporation comes to a small city and establishes a lighting plant, it should have the protection of certainty. But after it has been paid in full for all its services, the debt of the community ceases, and a new deal should be in order, if warranted by competition. It is a vicious law. It can serve no good purpose whatever for our municipalities. All general contracts have to be let for one year, and street lighting contracts would come under the same

law. But wherein it is vicious is in this—and I have no doubt that during the next few years a good many propositions will be made to cities, and I think the smaller cities should have this matter more at heart than the larger ones, because most of the larger cities are already provided—you will have a number of propositions come to your city to establish a plant to light the city for a certain number of years, and giving you the privilege of buying during the term or at the end of the term. With this law upon our statute books, you are left out in the cold. If it were repealed, it would be one of the great steps towards the acquisition of public utilities by municipalities.

Mr. McFarland. Would you then have it open so that you contract for any length of time?

Mr. Catts. That is a question. I don't think the ordinary law would permit that, or permit the letting of the contract for longer than one year. I would say, in addition to that, that the larger cities have some of them already controlled the thing in their new charters. The City of San Francisco lets for just one year, and I think the City of Los Angeles is in the same fix, and the City of Oakland, but I think that in other charter cities they are permitted to let it for more than one year, just as is the case with street sprinkling or water contracts.

Mr. McFarland. Would not your amendment be more properly an amendment to your charter?

Mr. Catts. Our charter had that every bug in it when it was first adopted, thirteen years ago. We wanted to get rid of that, but in investigating the matter, we found that if we did get rid of the bug in our own charter, we would still have the State law to contend with. The law is harsh in this way: That it prevents everybody from making a bid excepting the existing corporation. No corporation can come into a city, get a franchise for putting

up the poles and stringing the wires, and get a plant prepared inside of six months. It bars everybody else from coming in as I say.

Mr. McFarland. In the municipal act for cities of the sixth class, they are permitted to contract for lighting in excess of one year.

Mr. Catts. I think cities of the sixth class take the law into their own hands. They let the contract for a year, and at the end of the year they just let the contract run on.

Mr. McFarland. I think lawyers have passed upon it as being good to that extent. For that reason Riverside has been able to control some of these privileges, and has remained a city of the sixth class largely on that account.

Mr. Robertson. We have had the same difficulty up our way. I believe about eight or nine years ago an electric light company came in there and made a big fuss because they were only permitted under the law to bid for one year at a time. We thrashed the matter out at our Board of Trustees and before the citizens, at the time that a contract was made whereby a system of fire signals was rented to the town for five years, which system was owned by the electric light people. They brought up an attorney from San Jose, and he brought a big lot of books with him to support the contention of the case of McBain vs. City of Fresno. They made a contract for five years, and when they came to examine that contract, they found that only applied to the running of a sewer farm for five years, and on that they made a statement that any city could make a contract for more than one year. Judge Hughes, of Sacramento, in rendering his decision in a case there in this very matter, a similar case to the one spoken of by Mayor Catts, said that one reason why it was not good policy or good law to have a contract for more than one year was, that when you let a contract for a longer period, there might in the meantime have been some im-



provements in the system of lighting whereby the light could have been produced at a much less rate; also that it shuts people out from honest competition. I believe the intent of the legislators in making the time limit one year was, that honest competition should be invited. Suppose, for instance, that we five years ago had made a contract for five years at about \$11 per lamp, which we were satisfied with at that time. Our rate has been cut down by the same company to \$6.75, and they have just reduced it voluntarily. I think that the proposition of having it year by year is a good thing for cities of the sixth class. Of course, if we take up the proposition of buying a plant on the installment plan, as sewing machines are bought, that makes quite a good deal of difference. But I do not believe the example of Stockton is to be commended all the way through. The Mayor admitted that they have never shown good, sound, business judgment in the past. He stated, I believe, that when they allowed the works of a big concern that furnishes power from way up in the mountains to come through Stockton, they did not exact anything from them, and the first thing they knew, they made a combination with the local company, and up went the price. If you give those people a five years' cinch, it cannot be changed until the end of that time. One of the first principles of law, well established in Parliament, with all its power, is that no Parliament shall make a law which shall bind succeeding Parliaments. So if we had this law arranged so that we could make five-year contracts, we could go to work and tie up our successors in office on a contract which possibly would not be for the good of the municipality. So in my judgment, it is not a good proposition for us to advocate the making of contracts for a longer period than that in which the officers who make them are in power. So far as I can see, I think this one-year proposition is all right.

Mr. Catts. In answer to the gentleman from Los Gatos, I will say that this law is merely a special law; that there are general laws on the statute books covering contracts in general. It seems to me that this law was formed for the purpose of shutting out competition, and for no other purpose in the world, and that is just what it does, notwithstanding the gentleman's contention: You cannot get any established company to come in and bid on a one-year's lighting contract. The city of Stockton does not ask that the time be extended to two or three or five years, but merely to let street lighting contracts take the same course as other municipal contracts.

Mr. Keegan. I am a home ruler, Mr! President, and I think Mr. Catts, in taking a home rule standpoint, has taken just the right one in this matter. In 1896 I served in the Legislature. We thrashed out this same subject. If you will look at the statute books, you will find that there is a statute there which makes it possible in the State of California for all towns of a population of 10,000 or less to contract for any length of time that they see fit. I had the honor of putting that bill through the Legislature myself. We had a municipal company in Santa Rosa that was charging us an outrageous rate, and there was a home company willing to do the fair thing. But it was not possible for them to take a contract for one year in competition with the other company; the old company would be willing to do one year's business for nothing if they could kill off the home company. I sat down for two hours in front of his grace, the Governor, trying to make him understand that fine point. I would not have understood it myself. I presume, if it had not been brought home to me at my own town. There is not a single doubt, as Mayor Catts says, but that this one-year contract law was passed at the dictates of the monopolies of the State. I went to the Los Angeles delegation in the Legislature, and to the Oakland and San

Francisco delegations, and I said, "Have you any objection to this bill, and will you vote for it?" and they said "Wait till to-morrow." That is always the way with our large cities; their legislators have to "see a man" before they can say whether they will vote for a measure or not. They concluded that they did not want it. Then I inquired if they would permit me to introduce a bill with reference to cities of a population of less than 10,000, and they had no objection. It is my judgment that the same rule ought to apply to the larger cities. In my judgment, the one-year contract law is one of the many crimes committed against the people of this State. In order to get the matter before the convention, I move that this convention, through its Legislative Committee, recommend that a bill be introduced repealing the present law regarding one-year contracts.

Mr. Frary. I come from a city that pays a little bit more for street lights than any other city in the State, I presume, and it is just on account of the one-year clause. We have an established company in San Diego, and no company is coming in to put in a plant on a one-year's contract. Suppose they came in and got the contract for one year. The old company would propose the next year to do it for two or three dollars less, and they could well stand it. So I hope we can get rid of this one-year clause.

Dr. Chapman. It appears to me that in making this change, there is but one danger that we have to face, and that is that a corporation might interest itself in our politics to the extent of electing its own Board of Trustees, and then secure a contract for twenty or thirty years, after which they would not need to be interested in political affairs. Aside from that, I think it would be decidedly advantageous.

The Secretary. I would like to ask Mr. Catts whether or not an express declaration in the charter by way of

amendment providing that you can make contracts for electric lighting for more than one year, but not to exceed four or five years, would not govern the general law on the question.

Mr. Catts. No, the charter would not be superior to the general law in any case. The courts have decided that where the charter and the general laws conflict, the charter must give way.

The Secretary. I do not so understand the law.

Mr. Catts. We are going to get at it in this way, Mr. Secretary: If we can put this clause in our charter, we are going to do it—we are going to put in a provision that it will be the object of the charter to use all legal means towards the acquisition of public utilities, and that will be one of the means that we will use to get the better of the law, if we cannot have the law changed.

The motion was duly seconded and unanimously carried.

#### **Whether Licenses Should be Collected by City or County.**

The Secretary read the following communication:

"I would respectfully call the attention of the League of California Municipalities to the fact that under the present law all licenses may be collected by and retained by incorporated cities and towns. The chances are that supervisors of counties may seek the modification of this law so as to deprive cities and towns of so doing; and unless the authorities of municipal corporations take the matter in hand to keep the law as it is, a change may be secured in the next Legislature. I hope this matter may be brought before the League. Yours truly.

Mr. Kennedy. We are very much interested in that subject. I intended to bring it before the convention at some opportune time, and this seems as opportune a time as any. Under the



law prior to 1901, a county was able to license both for regulation and for revenue. The consequence was that the counties imposed a license on our saloonkeepers in Chico of \$150 a quarter, and the Board of Trustees has always been composed of honest gentlemen, and it was considered the city's welfare not to put on an additional license to any amount, and so they made the city license only \$15 a quarter. When the last Legislature added the new section to the Political Code and took away the power to license for revenue from the counties, the Board of Trustees made the city license \$150, and that all goes to the city. It has worked very well for the municipality. It has enabled our city to make improvements, and it was somewhat involved in debt, like some other municipalities, before we obtained these licenses, while now we have paid up everything. The city desires to make further improvements, and the saloonmen like to pay this money to the city, as the city is the one that does the regulating of the business. So far as saloons are concerned, the entire burden is on the city, and the revenue derived from it really ought to go, as it now does, to the city. The present rule gives us self government, and that is one of the chief things we desire to obtain by these meetings. I would very much like to see a resolution passed or some action taken upon the subject, instructing the Legislative Committee to use all honorable methods to have the law remain as it is at the present time.

Mr. Ey. I should like to inquire whether, under the Supreme Court decisions, you can license a merchant and enforce the collection of that license.

Mr. Turner. We do it in Merced.

Mr. Kennedy. For the gentleman's information, I will say that in all cities, with the exception, perhaps, of cities of the fifth class, Boards of Trustees have power to license for regulation only,

and the Supreme Court in a very late case involving the City of Sonora decided that cities of the sixth class could not impose any license whatever on a lawyer or a doctor or dentist, and could only license those things capable of regulation; that Section 3366 of the Political Code excluded their licensing for other purposes than regulation. So that would exclude your business license and your professional license. About the only thing that, in my opinion, you can license is the saloons, itinerant merchants or peddlers, and also lawful games and theaters. All of those need regulation and may be regulated.

Mr. Knudson. How about laundries? We only license saloons, laundries, and butcher shops.

Mr. Turner. I don't see why a laundry should be licensed any more than a merchant, a blacksmith, or a barber.

The Secretary. Perhaps I can speak with some authority upon the license question, because I think I was instrumental in getting the law changed, and I think I know very well the history of license legislation in California in recent years. I have not yet read the decision, but I understand one has been recently rendered in the Sonora case mentioned. I do not know whether it goes to the extent of emphatically saying that you cannot license a general business. But so far as that affects fifth class cities, it does not apply. Do you so understand, Mr. Kennedy?

Mr. Kennedy. I understand it does not apply, because there was an act passed the same day, afterwards, giving cities of the fifth class the power to license for regulation and revenue; but the Supreme Court in some of its decisions holds that an act such as that would be special legislation.

The Secretary. The act which subsequently passed was simply a re-enactment of the section of the Municipal Incorporation Act that relates to the

powers of trustees of fifth class cities. Therefore, it is not a special act. An enactment by the coming legislature in the same way of the powers of trustees of the sixth class cities would restore the law to its former state in that respect. We have already recommended an amendment to that particular section, so that the coming Legislature may restore the power of sixth class cities to license for regulation and revenue, in which event I do not think it would be necessary to pay any particular attention to that decision of the Supreme Court.

Trustee E. E. Canfield of Chico. I would like to urge upon the convention the fact that the city licensing of saloons as opposed to county licensing is of vital importance to the towns and cities that are separated from the county seats. We are unfortunate enough not to have the county seat. The cities take care of the saloons, and they should have the revenue. I think every city interested in this matter should instruct its legislators to look into the matter and see that the law remains as it is.

Mr. Brown. There is possibly another side to this question, Mr. Chairman. While it is true that the city furnishes the police protection to keep the saloons in order and take care of the men who are made drunk or disorderly, at the same time, the county has an expense in the fact that it maintains courts of record for these matters. I believe that saloons are responsible for a great deal of the business that is transacted in the courts, the expense of which is borne by the people of county and State outside the cities as well as in.

Mr. Canfield. I move that it is the sense of this League that the Legislative Committee be instructed to use their best endeavors to have the present law regulating the license question in regard to saloons by cities instead of counties maintained.

The motion was seconded and carried unanimously.

### Cost of Electric Light.

Mr. Davis. I would like to ask Mr. President, if it is in order, that the delegates here present give me the figures at which they are furnished electric lights. I think it will be to our advantage to have those figures noted, as well.

Mr. Ey. We have a contract with the Edison Light Company for five years, and we pay them \$6 per arc light, supposed to be \$2,000 candle power, running every evening until midnight, moonlight schedule. We pay 60 cents a month for incandescent light, supposed to be 16 candle power, on moonlight schedule every night in the month. The city hall and power house and all are furnished with lights free.

Mr. Clark of Chico. We have something like 445 incandescent 16 candle power lights, for which we pay 60 cents per month to be lighted half an hour before sunrise, all night, every night in the year, moonlight or no moonlight. We have one arc light at the depot which runs all night at \$8. Before we had the incandescent system, we had 33 arc lights, and run on moonlight schedule lighting until 12 o'clock, we paid \$330 a month, or \$10 a light per month.

Mr. Johnson. Santa Rosa pays \$7 per month per arc light per night, running all night and every night in the month. We have now 62 arc lights.

Mr. Chapman. We take our lights from the main line of the Bay Counties Power Company. We pay \$6 for 7 arc lights, supposed to be 2,000 candle power, and we pay \$1.30 a month for incandescent supposed to be 25 candle power. We are burning 87 incandescents at present, and have 23 incandescents being installed now. The lights are run on 100 voltage, and they are not entirely satisfactory. A great many complaints have been made by private citizens, and to overcome that, they run the voltage a little higher, so we are contracting on 100 voltage, and really



running under something more to insure satisfaction.

Mr. Knudson. In Sonora, Mr. Chairman, we have 68 incandescent lights, and we pay 60 cents per month, running all night, every night—16 candle power.

Mr. Ey. I will say, for the benefit of the gentleman from Santa Barbara that if they make a contract to be sure and insert in the contract that even if it is moonlight, if it should be foggy or cloudy or rainy, that they must light up just the same as at any other time. We had that inserted in our contract. If you do not insert that the company will never do it—that is, they will never run it as they should.

Mr. Turner of Merced. In Merced we had six arc lights supposed to be 2,000 candle power. We pay \$9.45 a month for them. For our 99 incandescent lights 32 candle power, we pay \$1.10 a month. They are to burn all the time, that is starting say at 5 o'clock and burn until daylight. In fact, they turn them on before the sun goes down, because they have to supply stores and so on, and they are all turned on at once.

Mr. Meyer. In Livermore we have an entirely incandescent system, and we pay \$1.50 for 32 candle power light in the main street, and we burn the lights all night. We have 240 lights.

Mr. Lightner. In Bakersfield we have about 55 what are said to be 2,000 candle power arc lights, and we have been paying \$8 a month upon moonlight schedule and \$10 for the all night schedule. But in May of this year the company gave a reduction from the old rate, and now we pay about \$8 a light for the old 55 lights all night.

Mr. Kincaid. We are circumstanced differently from most of the cities that I have heard reports from. We own our own water system at Redwood and our own electric light system, but we do not operate them ourselves—we purchase the power. The company

with which we have a contract at the present time operates our pumps, pumps 125,000 gallons of water per day and furnishes the power for the equivalent of 35 arc lamps, and for that service we pay them a flat rate of \$266 per month.

Mr. Morgan. In Auburn, Placer county, we have about 55 lamps and pay \$1.50 per month for incandescents, and we have now been raised to \$1.65.

Mr. McFarland. In Riverside we purchase so much more power from the Edison Company, and in addition have our steam plant, which carries us over the heavy lighting period, say from 5 o'clock until 9 o'clock in the evening. We have this steam plant to generate something 600 horse power, so that we have in the city 71 arc lights and 700 incandescents that are lighted by the city. As a result of that method, the arc lights costs us about \$4.80 per month. We operate on moonlight schedule for our own benefit, but it would not cost us any more to run it all the time. But the power is used during the day time, which we purchase for the purpose.

Mr. Clark of Santa Cruz. I might say, for the benefit of some of the delegates, to show the profit that is made by some of these corporations, that the city of Santa Cruz has 74 2,000 candle power arc lights, and it cost us \$2.50 a month. We do our own pumping. Our sewage is run to a well and pumped from that, and at the same time, we light the city and do the pumping. We use on an average 60 cords of wood per month. We pay \$3.15 per cord for that wood. We installed the power system, and we have not any direct report from the electrician as yet as to the exact cost, but nearly one half of it is in wood. So you can see what the city of Santa Cruz is doing with its lighting system.

#### The Granting of Franchises.

Mr. Turner of Yreka. Mr. President,

I should like to inquire what arrangement has been made by any of these people in regard to electric plants, what restrictions have been placed upon them. In Yreka we are in receipt of an application for an electric light franchise, and I would like to have information to take home to our people, something about the arrangements that the different towns have had with the companies when they have granted them franchises. We already have one electric plant there, and we expect a competing plant, which will probably be taken up as soon as I return home.

Mr. Kirkbride. I will make one suggestion with reference to the franchise to be granted, and that is this: That the company will doubtless figure on supplying power as well as lights, and that therefore it would be advisable for them to insert in their franchise a clause to the effect that the City Council will have the authority to fix the rate of electrical energy for power purposes as well as for lighting purposes. The City Council probably has that power any way with regard to the lighting, but it is a question whether they have that right when it is used for power purposes, and they certainly should have the right to fix the rate for power as well as for light.

The Secretary. The gentleman has asked some information, and we ought to take it up, and see if we can enlighten him in any respect. I will say that the conditions that are usually attached are: First, obtain a term for which the franchise is to be granted. They frequently want it forever, if they can get it. Second, if they cannot get it for an unlimited time, they want it for fifty years. If they cannot get that, they will take forty or thirty or whatever they can get. I think the proper policy to pursue would be to give them just as short a period for a franchise as they will possibly accept. Ten years or five if you can get them down to it, is better. In fact, I am inclined to

think, that if it is a genuine proposition, they will be indifferent as to whether they have a term at all or not. The policy of granting franchises as pursued by the United States in the District of Columbia and in the Philippines, and, during its term of occupancy, in Cuba, was, as I understand it, substantially this: That they granted no term franchises whatever; whatever franchises they granted, and whatever conditions were imposed, were always subject to amendment, modification or repeal. If the United States can pursue a policy of that kind, it seems to me that the cities and the state can do the same thing. If you can get a condition of that kind into your ordinance granting the franchise, I do not think any other conditions are necessary, because you can impose conditions from time to time as they appeal to you and appear to be necessary. It is a question, under a proposition of that kind, whether capital will invest its money, and I think that inasmuch as they do invest their money in places where that form of ordinance is required, that is to say in the District of Columbia and in the Philippine Islands and in Cuba, that it can be done with us. But if it is a speculative proposition, they will not do it. They will say capital is too timid and will not invest on a proposition of that kind. That is my idea as to the proper method of granting franchises in all cases. When you do that then you do not need any further restrictions whatever. You can make your reasonable restrictions and they will have to carry them out. I would like to hear this whole franchise question discussed, because it is the most important thing that our municipalities have to deal with at the present time. I notice that in the last year or two there have been a very large number of franchises almost given away, and I know from the experience that we have had in the past that those franchises are going to be extremely



valuable, and that monopolies will be created simply by the actions which we are taking at the present time, and we will find it very difficult to deal with them in the future years. I think it is time that we ought to adopt some settled policy in respect to them. We have no policy at the present time. I do not consider the Broughton Act of any value whatever to municipalities, and it affords no solution whatever to the question. If, however, it is desired on the part of the town of Yreka to impose conditions and to give a contract for a term of years, there are a good many other things necessary. You should provide the kind of poles and the method of construction, provide for all of the safe guards that attach to the conduct of electricity over wires in the streets. You will find a large number of ordinances in the different cities covering that matter completely, permitting the board of trustees to direct either the placing or the removal of the poles, the keeping of the poles in order, the painting of the poles, and, if necessary, the removal of the wires from the streets entirely, to be placed under ground, whenever the occasion presents itself. Then again, there is the question as to whether you should exact any percentage of the gross proceeds of the company. Personally I do not believe in that, because I think ultimately the people have got to pay it, and it is simply an indirect form of taxation. But as I stated before, this franchise question we have not yet really approached the solution of.

Mr. Ey. Mr. Chairman, I would add that whoever wishes to grant a franchise should prepare their own franchise, and not let the corporation attorneys do it for them.

Mr. Catts. There is another thing, Mr. President, which I think is at the root of the whole matter, and that is this: I do not think a city should be permitted to grant a franchise on what we call general terms. I think there

should be a state law to that effect, and that whenever a franchise is granted and it shall state specifically just what is meant. There are too many franchises granted in too much of a hurry. As the secretary says, we do not make conditions or specifications as we should. We grant franchises always on broad general terms, and those terms are always interpreted to the advantage of the owners of the franchise, and not to the advantage of the city.

### The New Street Law.

Mr. Kincaid. I desire a little information, Mr. Chairman. The convention will remember that two years ago there was a bill drafted providing an alternative act for street improvements. What I would like to find out from the members present here is as to whether that act has been pursued in doing any street work, and how it has been found to work, what defects if any there are in it, and so on. If any of the cities have had any experience at all under that act, I would like to know what that experience has been. I myself have taken proceedings in our town for street work under the act, and while I have found it quite satisfactory in some respects, in some other respects it has not been satisfactory.

Mr. Frank. As far as I know, I have been watching that matter as closely as possible, and I do not know of any city that has acted under that act. They have all taken the Vrooman act. We had some street work to be done, and I intended to pursue the other act, but I was rather afraid of it, so I went to work under the Vrooman act.

The Secretary. In answer to Mr. Kinkaid's question, I will say that so far as I know, no city except Palo Alto has carried on proceedings through that act and carried the proceeding through. I understand they did make one street improvement and went through the entire formula, issuing bonds and everything. I had a short talk with Mr.

Hutchison of Palo Alto in respect to that law, and he said that that proceeding had developed some defects, but I did not have time to get from him just what they were. He said he expected to be here at the convention, and if called upon, he would state exactly what they had run against in administering the act. As he is not present here, we are short his information. Mr. Kincaid told me also that they had done some work in Redwood City, and he can answer as to how successful it was.

Mr. Kincaid. I will state, Mr. Secretary, that we have taken five separate proceedings under that act, four of them for street purposes, and one of them a sidewalk improvement. On one of the streets, the assessments were paid up in full, and consequently no bonds were issued. On two of the other streets a part of them took advantage of the provisions of the act which allowed them to pay up the assessment in yearly installments, and we had to issue bonds. I would state that we had no difficulty at all in selling our bonds. They were advertised, and we had more than one bidder for them. So that in all these proceedings, we have been very successful, and we have money in the treasury, and the work has been actually done.

The Secretary. I think you will be the one to furnish us the information, instead of one to receive it.

Mr. McFarland. We went so far as to arrive at the point where bids were opened, but the contractors all added ten per cent more under that act than under the Vrooman act. So we cast out all bids, and went back to the Vrooman act. The contractors admitted that they bid more under that act than they did under the other.

Mr. Kinkaid. You understand the contractor is taking no risk at all under this act?

Mr. McFarland. They do not admit it. So we went as far as opening the

bids, and then we went to work under the Vrooman act.

#### Roll of Towns.

The President. I will first call upon our friend Mayor W. H. Turner, of Merced, for a report of what his city has done during the last year.

Mr. Turner. Mr. Chairman, a year ago I reported that Merced had raised its saloon license from sixty dollars to two hundred and sixty dollars a year. The saloon men, however, rebelled, elected a majority of the new board, and reduced it to one hundred and sixty dollars. I shall have to admit that that is advancing backward, and I so told them at the time the move was taken. We have also finished the street work that I announced we had in view, and have in contemplation some further improvements in the same direction. There has been started a movement, too, to own our own water and light plants. We are having estimates prepared now and probably before I go back I will get the report of an engineer upon the expense of it, and then the matter will be submitted to the citizens for their vote. While we have a fine water system there at the present time, our people think that the rates are entirely too high, and we ought to have cheaper water.

The President. Is it proposed to issue bonds for the purchase of the plant?

Mr. Turner. Yes. Whether or not these citizens will vote for the bonds, I do not know. I hope, however, to report a successful termination of that matter at the next meeting. I think those are the only improvements that we have started.

The President. I will now call upon Mayor Catts, of Stockton, for a report as to what his city has done.

Mr. Catts. I shall have to give you my report from memory, Mr. President, because I have the data that I had prepared for this matter at the hotel, not ex-



pecting to be called upon this morning. If I understand it correctly, the idea is that we shall give a report of what the cities have done in the way of money expended in improvements and betterments all along the line during the year. In that connection I will say that the city of Stockton last year expended for a continuation and betterment of the out-fall sewer \$16,000; for surface watering \$24,000; for the construction of a permanent bulk-head, a concrete bulk-head, and wharves, to get rid of the expense of the old wooden wharves, \$8,000; for the improvement of streets, new Macadam streets, under the Vrooman Act,  $1\frac{1}{2}$  miles, at an expense of \$31,600, making total expenditures of \$79,600. In a small way, the city has bettered itself to the extent of inaugurating a system of hand sweeping of the streets, instead of altogether machine sweeping. We have a committee at work now, forming amendments to our charter, so that our city will be better governed, have better laws to work under and eliminate, to a certain extent, partisan politics. Our fire apparatus buildings and the like have been brought to a system of perfection that is not exceeded by any city in the state. In fact, we have the model fire department of the state today. Even San Francisco comes to us occasionally for information. It is the same way with our police department. It has been brought up from a state of apparent apathy to a very effective force. I am sure we are getting our money's worth out of the money paid police officers.

I notice in next to the last issue of "Municipalities" giving the tax rates of the different cities, that the tax rate of Stockton apparently seems to be about the highest on the list. We do have a large direct tax rate. But our revenue from other sources is not large. We do not license any business. The only license from any body is from the saloons, and that is forty dollars a quar-

ter, and we get \$18,000 a year from all licenses. If our revenue from licenses equaled that of say Sacramento, Oakland and San Jose, our tax rate would be about \$1.40, instead of \$1.65. Moreover, under our peculiar form of charter, the school tax rate is included in the \$1.65. I believe that is all.

The President. I want to ask you, Mayor Catts, about charging forty dollars a quarter for saloon license. How many saloons have you in Stockton?

Mr. Catts. One hundred and twenty, I think, in a population of twenty thousand.

The President. What do you think of the proposition of limiting the number of your saloons, and raising the license? What do you think the result of that would be?

Mr. Catts. The saloon element in our town, as is the case in San Jose and Sacramento, when it comes to an election, wield quite an influence, and about the only way to work any such reform is indirectly, through their own organization. If that could be done I think it would be a good plan, and under such an arrangement the license could be raised, perhaps gradually, and when the old saloons go out of business, do not issue any more licenses to new ones. I think the limit would be an excellent idea.

The President. I think you will find that will work very well. The more you limit the number of your saloons, the better it will be for the city, and at the same time, by an increase of the license rate, the revenue derived therefrom will be just as great.

Does your city own its fire buildings property?

Mr. Catts. The buildings occupied by the fire department, yes, and the city has something like \$25,000 worth of water mains as well.

The President. Does the city own its own water plant?

Mr. Catts. It does not, no. But these water mains were put in as be-

ing something in that direction, so that when the city concludes that it wants to own its own water system, so much in that direction will have been accomplished. A movement will come up during the next three months, in a substantial way—it is now on foot—towards establishing an electric plant there. And when we get a cheap power in Stockton, that will solve our water problem, because our water problem is merely a pumping proposition. We should have cheap power in Stockton. The Standard Electric Company comes through there, and we gave them the franchise with the expectation that they would give us cheap power. But they made a combination with the electrical people there, and kept the rates up. However, when the city establishes its own electrical plant, then we will have our own water works.

The President. With reference to hand sweeping: does the city do that itself, or is it let by private contract?

Mr. Catts. The city does the work itself directly under the street superintendent.

The President. You pay your laborers what?

Mr. Catts. \$2.50 a day for nine hours a day, and keep them on the street continuously.

Mr. Kirkbride. What do they do with the water mains at the present time?

Mr. Catts. The water mains are given over to the use of the water company, but the city fixes the rates, and in so doing, takes that into consideration.

The President. Do I understand that the city owns the main mains and that the water company owns the connections?

Mr. Catts. The Water Company owns the plant and makes all the connections to the houses.

The President. Have you any kind of an arrangement with the Water Company by which, if the time comes

for the taking over of the plant, you can do so?

Mr. Catts. No, sir. We do not need any. As I say, the water is underneath the town, and it is merely a pumping proposition. Water can be had all the way from eight feet to a thousand feet anywhere under the town.

Mr. Ey. What is the rate that you charge to consumers?

Mr. Catts. The city rate is seven cents a thousand gallons.

The President. Do you use a meter rate altogether?

Mr. Catts. No. It is a flat rate.

Mr. Turner. What is the rate per house, say? How is it with your house, for instance?

Mr. Catts. I have a house of nine rooms and a lawn, my lot being 75 feet front and the lawn occupying a space probably 60 by 40, and besides that I have some fruit trees in my back yard, and I use water for watering them. My rate is \$1.25 a month.

The Secretary. You spoke, Mr. Catts, about cheap power. What is your idea in that direction?

Mr. Catts. The proposition on hand is that the city shall develop electric power by crude oil, establishing a plant for that purpose.

The Secretary. Do you calculate that that will be cheaper than purchasing the electric power from one of the companies there?

Mr. Catts. Yes. Stockton is very advantageously situated in all directions, so far as electric power is concerned. We are within forty miles of three different propositions that could be developed as water power, for the development of electricity, but even with that advantage we figure that with oil at the present rate, and it has been offered to the city at 65 cents per barrel, we can develop electricity very much cheaper than it can be brought to us.

The Secretary. I have been told by Mechanical Engineers that with crude



oil and a steam plant you can develop power cheaper than you can get it for from the transmission companies.

Mr. Catts. Yes, you can, on account of the loss in transmission.

The President. I will now call upon Mayor Frary of San Diego for a report from his city.

Mr. Frary. At the last meeting of this League, the City of San Diego had but recently purchased the distributing system and water system for the city. At that time we had hardly had it long enough to tell very much about it. But I want to tell the members of the convention now that it has been a success. Just before I left, I asked the secretary of the Board of Public Works to give me a few figures on the water system, and I will give you the figures on 11 months of the year 1902.

Total receipts, \$72,394.73. Expenses and cost of operating, \$56,075.50. That shows a profit of \$16,319.23. Of that amount we have spent in improvements to the system, for pipe, \$17,280 and for laying the same \$10,354. Total for new work expended \$26,634.14. That leaves an excess of expenditures over receipts of \$11,314. I want to say that when we purchased the water system, we paid \$600,000 for it. At that time we figured that it would cost about \$200,000 at least to put it in order. We have not been able to vote any improvement bonds, so far, although there is a movement on foot, and we have had to take the receipts to make what needed improvements we have found, and we do find that there are a great many improvements necessary. At the present time we are figuring upon an improvement bond issue, covering general improvements for the city, and the estimate is all the way from \$300,000 to \$600,000. The water department is supposed to get about \$200,000 of this. About \$135,000 will be devoted to the improvement of our sewer system. The

system that we have there is all right, but the city has out-grown its present sewer system, as it was put in some fourteen or fifteen years ago. \$40,000 is estimated as being necessary for an improvement in the fire department, not particularly in apparatus, but we are now leasing land, and renting our buildings, and we think it is very good scheme to own them. We have also surveyed a very extensive system of boulevards, consisting of something like fifty odd miles. We would like to have the work upon that carried through, too. And if the bond issue carries the work will be begun, although of course the whole fifty miles will not be undertaken at once. We also desire to make improvements to our park, which contains 1400 acres. We have a public spirited gentleman down there who has contributed the use of a landscape gardener who will be there and lay out the entire 1400 acres, and then we can begin upon the plan laid out by him, beginning in some corner somewhere, and gradually work towards the improvement of the whole park. At the present time the park is not improved at all.

The President. How did you acquire 1400 acres of land?

Mr. Frary. It was State land, and was set aside for a park, to begin with. There has been an effort several times to cut it up and sell it off in lots, but it is still held intact, and always will be, I think, because there are a large number of people in San Diego who think that 1400 acres is about the right sized park for the city that we expect to have there in due time. Some two years ago, we changed our mode of taking care of our streets. The city up to that time had appropriated money for the Street Department, and though all of the money was expended, we did not succeed in getting very good improvements in our streets. So we started in about two years ago to purchase our own teams, and we employ constantly 18 men in the street department. The

men are paid \$55 a month, except the man who runs the street sweeper and the man who takes charge of the stable, each of whom is paid \$60 a month. During the last year we have purchased an asphaltum repair outfit, so that we now patch up all our own asphaltum streets, and we have six miles of them in the city. Moreover, during the last year, in addition to sweeping the streets and repairing all the asphaltum streets that we have there, the department has built some three miles of new road with the force. We find that the system works much better than the old style, for the simple reason that we have always got money available, and we found with the old style that when a report would come in that it was necessary to have a thousand dollars to make some repairs somewhere, the Council would vote the thousand dollars, and almost everybody had some old friend who could not get a job, and he would be put at work there and pull down his \$2.00 a day, and they used to hire one team and put on about fourteen or sixteen men to work that one team. You can imagine the amount of benefit the city derived from that kind of work. We have always been noted as a sidewalk town. We have thirty-six miles of concrete sidewalk, of which amount 13,742 feet was laid during the last year, so that we are covering the city pretty well with cement sidewalks. Not only is the work of taking care of our asphaltum streets by the city under the present system a good plan as a big money saver, but we used to wait until the pavement got full of holes and then let a contract, whereas now we do the patching ourselves, and do it promptly, and the rate per square foot is from  $\frac{1}{2}$  to  $\frac{3}{4}$  of what it was before.

A recess was here taken until 2 o'clock p. m., and the matter of the reports from towns was again considered at the evening session of Thursday, December 11, 1902, Mayor W. H. Tur-

ner of Merced, first vice president of the League, in the chair.

The Chairman. The roll of towns will be called now by the Secretary, and we will hear from each in order, as to what has been done during the past year in the way of improvements. We will first hear from Berkeley:

Mr. Thomas. In the first place, during the last year we have put in the Gamewell fire alarm system, which cost us something over \$8,000, and we have 22 boxes. There was some discussion among the Board and our people generally, as to the advisability of putting in a fire alarm system where we have 1200 subscribers of the telephone system. The telephone people were asked if they would take the responsibility of putting a line through the seven fire houses and transmitting the alarms to those fire houses, and they did not want that responsibility. Personally I think it is very doubtful whether a city with the houses scattered, one that has not a large business center, should put in a fire alarm system. But the system is a good system, and works very well indeed.

Again, at the last meeting of the league, we had a volunteer fire department pure and simple. During the year we have accepted the volunteer fire chief as the head of the department and regular fire chief, and we give him \$55 a month, and he has been made building inspector and gets fees besides, so that he gets about one hundred dollars a month in all.

Another matter of interest with us in Berkeley is the question of tree planting. Some four years ago Berkeley decided to go into that matter, and at the last meeting of the board of trustees, petitions were filed from the residents along seven or eight streets asking that trees be planted. They designated the kind of tree they wished, and the matter was referred to the Town Engineer. The matter was tried once before in Berkeley, but no bids were



received. So, in order to avoid the question of loss to the bidder, a corporation is to be formed of those people who are most interested in this matter and they are going to take the full responsibility and so we are not going to have the trouble that we had the first time. During the last year we have been actively engaged in bituminizing the rest of our business streets, and we shall very soon practically have all of the business portion paved with bituminous rock. Moreover we have put in a great deal of macadamizing during the last year. Our work on concrete sidewalks, lateral sewers and main sewers has gone on, and development generally with us has been something wonderful. I do not know what may be the condition in other parts of the state, but it is impossible with us to stand on any corner and not see at least three or four buildings in the course of construction. This of course means lots of street work and lots of cement walks.

The Chairman. We will next hear from Fresno.

Mr. Stephens. Since you last had a report from Fresno, Mr. Chairman, we have adopted a new charter there, and we are now working under it, with eight members of our board elected, and the Mayor, who is chairman of that board. We have a board of school directors consisting of eight members, and we have some appointive boards—police, fire and health. We appoint our city attorney, our street superintendent, our city engineer, chief of the fire department, and all the members of the fire and police departments. The police department has been reorganized, as well as the fire department, and we now have a paid fire department instead of a volunteer department. One of the first things we tried to do under our new charter was to get a city water works and an electric light plant. We thought the rates we were paying for water were too high, and though we

had an election to vote bonds, but the bond issue was defeated. The amount voted upon was \$280,000, which was about, our engineer thought, would be the right thing for a city the size of Fresno.

The principal fight made against the issue was that we had the right to reduce the rates of the old water company. Then we reduced their rate twenty-five per cent, and now we have a case in the federal courts where we have been enjoined, and they are collecting the old rates. The people now want to vote on the matter again. Under the new charter, our city is made non-partisan. The nominees are upon the two old tickets, but after being elected, everything is done on a non-partisan basis. Our department consists of half democrats and half republicans, and under the charter we shall have to keep it that way. In fact, as to all of our employees, we take into consideration the matter of their politics, so as to keep them divided about equally. We have suppressed lotteries of all kinds. We have suppressed gambling. There is none of it in Fresno at all now. All the professional gamblers have left town. We have had quite a hard fight on the nickel-in-the-slot-machines, but they are all suppressed. We had the hardest fight on what they call the cigar machines, but after a hard legal struggle in the courts, the city won. At the time we went to office, the nickel in the slot machines were paying a revenue to the city of \$2100 a quarter. When we cut that off, it made quite a difference in our revenues, so we added \$200 a quarter to the saloon licenses, and that makes a profit of about \$4,000 a year. I have already made a report to you of the use of oil upon our streets. During the last year we have built about six miles of sewers at the cost of about \$15,000. At this time we are just calling an election to vote \$25,000 in bonds for an extension to our old sewer system, which is

rather small for our city. We are also calling for a bond issue to the amount of \$30,000 for installing septic tank to take care of our sewage. We have what is called a sewer farm. That farm is situated about nine miles from town, and it belongs to a private individual. We pay him \$150 to take care of our sewage, and I think it is worth about \$150 to him for the purpose of enriching his soil. But there was no one else to take care of it, and we could not help ourselves, and so we are now trying to make a change. The people out in that part of the country, too, are making a great deal of complaint of it, on account of its being, at certain times of the year, offensive in smell. They even go so far as to claim that sickness and death have been caused by it, and we are likely to have some damage suits on our hands. So we have decided that the septic tank is the way to handle our sewage. Our plan is to have a tank 150 feet long and about 80 feet wide and eight feet deep. The city owns all its fire buildings. We have three steam fire engines and one chemical engine. We are thinking about installing another chemical engine in one of the sections of the city. We have recently begun the erection of a library building, and I had the pleasure and honor of laying the corner stone a short time ago. The building is to cost \$30,000. It will be finished this year. Our government building has not yet been constructed, though we have an appropriations from the government of \$100,000. We have recently voted bonds to the amount of \$75,000 for building school houses. During the year we have had some little trouble with our saloons. We revoked the licenses of two men, and closed them up entirely, and had a great many of them before the Board. This is the way we handle violations of the law in that line, whether it involves the saloon or the gambling fraternity. We always try to handle them in the board. We do not have a great deal of trouble in enforcing the ordinance among our

saloon people, however. In fact, they are getting so now that they want to help us, and to enforce the ordinance. For instance, on election day this year they hired a special officer themselves to see to it that the ordinance and the law concerning back doors, et cetera, of saloons, was not violated. Just to instance how we handle matters down there, a short time ago we called the chief of the fire department into our office and told him that he was not filling the bill, and told him wherein he was short, and told him what would happen unless he enforced the rules that we had given the fire department. He said the rules could not be enforced. We told him that we would find someone who would enforce the rules, and we gave him a little time to consider the matter. At the end of the time we declared his place vacant, and put in another man. And when it came to the Ordinance with reference to the nickel-in-the-slot machines, we had a little difficulty with the chief of police. We told him to go and get all of the nickel-in-the-slot machines and bring them with him to the police court. The chief did not like to do that, because he was afraid he was afraid he would be liable on his bond for damages. In fact he had been told that he would be sued for damages. It ran for about three days before he did anything. He was then called into the mayor's office and asked why he had not arrested these people, and upon his saying that he was awaiting the advice of his attorney, he was informed that he would have but two hours to act, and in about two hours all of these men and their machines came up to the police court. So I think it is a very good idea to have the administrative officers, those who attend to your work for you, appointed. There is a good deal of work that has been done in Fresno that I have no memorandum of. But I will say that so far as municipal improvements go, there has been no time to play in Fresno. The meetings of our board run generally until mid-



night. We open our meetings promptly at 7:30, and if a trustee misses a meeting it costs him \$5, and it makes no difference whether he is sick or not. The trustees receive a salary of \$150 a month.

The Secretary. I think it would be interesting to the League, Mr. Stephens, if you would tell the members of the convention how you broke into the hose trust.

Mr. Stephens. Our board rather likes trouble. About sixty days ago we found it necessary to buy about 3,000 feet of hose. If you have ever any of you bought hose, you know that there is a combination, and it is pretty hard to get around it. We had bids come for our hose, and we found that all the hose in the market was worth about eighty cents—that was the price they had all agreed to put in. We had quite a talk with them, and asked them what they would do if it was necessary to do a little commission work around among the members—in other words, how much “boodle” there was in it? We found that there was about four or five hundred dollars, some where about that—we could not get anything very definite out of them about it. So the matter was referred to the police and fire commissions to see how much hose each of the companies would require. Some of the commissioners were willing and anxious to take what they could on the side and turn it into the treasury after the purchase was made, and we took a vote on it. I was presiding, and we tied them, and I had the deciding vote, and I put the vote against it, saying that it did not make any difference how clean their hands would be of the matter, they would not be able to convince the public that they had turned it all in, and I did not care to have our board besmirched. So we went to the people and we told them just what the situation was. We said “You sell this hose to other people for 80 cents, and you pay boodle upon it. You come down here where there is no boodle to pay, and you make us pay 80

cents for it too.” But they could not put the price down below 80 cents, they said. So we re-advertised, and when we re-advertised we told the men who bid that we had forty sets of old brass couplings that we wanted to sell, and that the man who sold the hose to us would buy those couplings. Then we had the hose offered to us for 70 cents that we had offered before at 80 cents. Then some body bid 25 cents for a set of our couplings, and some body else a dollar and some two dollars, and one of them bid \$2.50 a set. The man who bid the \$2.50 a set was the man who offered us the hose at 70 cents. So we saved \$400 on our hose purchase. But we had to talk very straight to those people, you may be sure.

The Chairman. We will next hear from Riverside.

Mr. McFarland. At Riverside during the past year we have spent and are spending (the system is not yet complete) \$30,000 on sewers, besides the oiling of roads, of which we have already spoken, and have expended \$40,000 on macadamized streets, also, including sidewalks and curbing. We have expended \$15,000 in an extension of the electric light system which the city owns. We put in \$1500 in the construction of a pavilion in the park. We have a new library building costing \$20,000 just completed. We have granted a franchise to a new street railroad to connect Riverside with San Bernardino and Redlands. We had one street railroad in there before, but this will make the connecting link. We started in to have a new charter in the spring, but wished to find out first if we could not obtain some amendments to 6th class municipal franchises; in order that we might possibly continue under that same system with a new amendment. Most of our street work has been done under the Vrooman act, and the city owns its own rock crusher, and we also have large beds of decomposed granite. The property owners are very anxious to have the streets fixed up in

approximately this shape: We have first  $3\frac{1}{2}$  to 4 inches of broken rock, and that is rolled, and then 2 inches of decomposed granite, and for the benefit of Mr. Catts, I would say that we have adopted specifications for these macadamized streets for having them oiled, so that we will have on top of this gravel oil. We have also tried oiling a macadamized street which has been laid previously with rather good success. Our electric lighting system has been so extended now that it covers a large part of the resident portion of the city. We have in use there in residences over sixteen thousand incandescent lights. And I might say here that in street lighting we have found incandescent lights on the street to give far more service and better service than arc lights, that is, the poles carrying the electric light wires have incandescent lights placed upon them, and it works especially well on those streets where there are trees planted along the street and where, if you have an electric light at the corner, the shadows are cast and interfere especially with those driving. We have also agitated a new system of fire alarms throughout the city, and the subject of a new fire department.

The Secretary. Will you kindly give us the cost of producing electric lights per kilowatt? Have you the figures with you?

Mr. McFarland. I have not the exact figures of the cost of production, but I can give you the figures as to what we charge.

The Secretary. I want to get at the cost of production. What are your charges?

Mr. McFarland. By meter rates, on the first 5,000 watts, 15 cents and on the next 95,000 watts 10 cents, and for all over 100,000, 6 cents.

The Secretary. That makes 75 cents for 5,000 watts?

Mr. McFarland. Yes sir, and we give the heavy users the benefit of a graded rate. We have, however, a flat

rate, which we use in stores there. We charge, with an 8-candle power lamp, 45 cents each per month, while for 16 candle power, it is 70 cents per month, and 33 candle power \$1.15, and they use them as long as they please.

Mr. Chapman. I would like to ask the approximate net profit upon that lighting system, if you can give it.

Mr. McFarland. It has been the past year about \$5,000, but that all was used up in putting in extensions, improving the system.

The Chairman. We will next hear from Santa Rosa.

Mr. Johnson. During the year past we have built a little over a mile and a half of new sewer. A mile of that was an extension of one of the 12-inch sewers of our town. We have also constructed a new septic tank. The tank and the new filter beds that we have constructed during the year have cost about \$3,000. We have also constructed two miles of new graded streets. We have added four new fire alarm boxes, making a total of 21, and we have two applications in that are under consideration. We have added ten arc lights to our city system. I think that includes about all the improvements that we have made during the year. We have a paid fire department of four men, with six call men. During the year 1901, for which I have the figures here, we had 22 fires, with a total loss of \$4,775; insurance \$4,130. This I think shows a good condition in that direction. The city owns its own pumping station, and furnishes water free to its patrons. The cost of maintaining the plant last year was, in round numbers \$7,500. We supply about 1300 families. The exact figures I have not here. There are three or four hundred families getting water from the old system, what is known as the Santa Rosa Water Works. If we had the water we could supply every citizen in Santa Rosa, and the time is not far distant when we will be in a



position to furnish all of our people with water. Another thing in the way of improvements that we have made during the past year, is the expenditure of about a thousand dollars in changing from wood burners to oil burners. We have put in two large tanks, with a capacity of about 16,000 gallons. I feel certain that money will be saved there. We maintain a free library as well as supplying free water and having a free fire department and a paid police department, all out of the tax rate of \$1.25. There is a tax of 25 cents on the \$100 to pay for the bond issue, and the other \$1, is all that is required for the ordinary expenses of the municipal system.

Mr. Stephens. I would like to inquire of Mr. Johnson whether there is a separate levy made to support the free water that he mentions?

Mr. Johnson. No. There is a levy of twenty-five cents on the \$100 for the payment of water bonds, but the amount spent in the maintenance of the water plant comes out of the general funds and out of the \$1 limit.

The Chairman. We will next hear from Santa Barbara.

Mr. Davis. Santa Barbara is governed by a Freeholder's Charter. During the last year our liquor license has been raised from \$45 to \$75, and also the restaurant license, which allows the selling of wine or beer at meals, \$10 a quarter. The number of saloons with us is limited to 24, and the Council have power, by ordinance, to revoke the license of any saloon at any time. Our merchants doing business there pay no license whatever. That was done away with by the charter. During the year we have expended \$60,000 in building new high schools. That fund was procured by an issue of 40 year bonds, 5 per cent. A special tax of 5 per cent was levied for improvements in the park. The tax rate of the city is \$1.35, \$1 for the general use of the city and 30 cents for the bond issue

and 5 cents for park improvements. The city is now bonded for \$160,000. We have also expended during the year \$65,000 for extending our water system, paid by a bond issue of 4½ per cent bonds. The city owns its own water works. There is, however, a private corporation which supplies the city with water, as to which the city fixes the rate. The city water is obtained by tunnelling in the mountains. We have expended in our tunnel construction and water system construction since the beginning, up to the 1st of July, \$118,000. The receipts for the same period have been about \$50,000. We now collect from consumers about \$1200 a month for water sold, and we supply for the city for flushing sewers and sprinkling the streets, water to the amount of \$6,000 a year. Our tunnel is now in the mountain one mile. We expect during the coming year to make provision to extend it through the mountains and on the other side of the mountains, by storage reservoir sites. We do not get all the water we could from the tunnel. The water is supplied to consumers at 20 cents a 1,000 gallons, and the minimum charge is \$1.25. We have during the year, in addition, oiled between two and three miles of streets, graded, curbed and put in about three miles more. We have also purchased a dumping ground for the city garbage, and we have in contemplation a furnace with which to burn it. The first of the year we will take up the matter of bonding the city for \$30,000 for an extension of the boulevard system, and also of funds for an addition to the water plant.

The Chairman. Santa Cruz is next in order.

Mr. Clark. The city of Santa Cruz has its water system and its own lighting plant, and what has been done in that city in the past year has been mainly in extension of those various departments, nothing particularly new. Our city streets are in good condition,

and we have good side walks throughout the greater part of the city and during the year there has been considerable work done in grading and improving streets. The sewer system is constructed in such a way that we are required to keep up a pumping plant from the lower level of the city. The sewage is carried out to the ocean and emptied into the ocean at a point two or three miles from the center of the city, and on the upper levels of the city the sewage is carried out by gravity, while from the lower portion of the city it has to be pumped over to the first plateau or level, and from there it is carried out by gravity. In the running of the pumps for pumping sewage we at the same time secure the power for running our lighting system. As Mr. Roberts told you today, we have 74 arc lights run by this system, and they are carried on at an expense of a little over \$2 per light per month. Mr. Roberts failed to mention today the fact is letting the franchise to the Power Company which furnishes the incandescent lights for the city, that under that franchise the company furnishes the city ten arc lights which are placed on the main business street of the city and run all night. That of course is in addition to the 74 other lights that we have, and if they were counted in, they would still reduce the expense per light in that proportion. In addition to that, we make the Power Company furnish us all the lights necessary for our public buildings as a part of the agreement upon the franchise. We have had in our city for a great many years two or three places where we desired to make some street improvements, and that work has been commenced. The hill leading down to the beach has been graded down, and the streets put in good condition. We have during the past year purchased a site for the Free Library. We have a Free Library in the city that has been maintained for many years, and which contains at the present time about 15,000

volumes. It is in rented quarters. We are one of the cities that has been favored by the generosity of Mr. Carnegie, who has given us \$20,000 with which to build a library building, and we will soon have a library in our city that we can be proud of. We have increased the number of our school buildings, both high schools and those of lower grade. During the past year we have elected a Board of Freeholders, and they have adopted a charter, and that charter is now being published and along the latter part of January we hope to have a successful election and to carry our point and put the new charter in operation, so as to get it before the coming session of legislature. That charter provides for the election of a mayor, five councilmen, a city treasurer and a city clerk, the city treasurer to be tax collector and the city clerk to be assessor as well. All of the other offices are now and will be under the new charter, provided it carries, appointive. We have passed quite a number of ordinances relative to various matters, and one in regard to dogs that may be something new to some of you. Our city has become over run with curs, and they had become a little too numerous. We thought it would be a good way of getting rid of some of them to license them, and so far that license tax has been pretty well paid upon the good dogs, and the pound master has been getting rid of some of the poor ones. I do not think of anything else that will interest you. We are getting along in the even tenor of our way, trying to give our people the best administration possible, and there is a good, live sentiment there are all the time looking towards an improvement in the government in every way.

The Secretary. How does your wave motor work, Mr. Clark?

Mr. Clark. We have a wave motor that I may say operates successfully. It is a very simple proposition indeed. It is nothing more or less than a well about 8 feet in diameter, sunk in the shore



line perhaps 50 feet from the edge of the water. That well has been sunk to a depth of a little below the low tide so that every breaker, whatever large or small, dashing against the shore, will go into a tunnel that runs from the low tide slide back into this well. From the round well there is a square hole which happens to be 2 feet 7 inches and a half or three feet square which runs out to the water. Of course, if it be a small breaker, it cannot any more than fill it full of water. If it is a large breaker, it cannot any more than fill it full. So the size of the tunnel limits the quantity of water that will run into the bottom of this well. Near the bottom of the well, we put in a circular float that will just work up and down in the well. Every breaker that comes in raises that float. As the breakers recedes, the float will drop of its own weight. So there you have an up and down motion for the piston of your pump, and that is connected with a pump in the same hole, and it pumps water, and pumps it up into a tank perhaps 50, 60 or 75 feet above the level of the height that we have ordinarily established a water tank. That pumps the salt water in quantities sufficient for the needs of the city for sprinkling the street. We sprinkle about  $4\frac{1}{2}$  miles of road with salt water at the season of the year that it needs sprinkling.

Mr. Stephens. In what amount do you license your dogs?

Mr. Clark. Two dollars a year on dogs, and we require the owner of the dog to go to the tax collector's office and purchase a tag, which he places on the collar of the dog.

The Chairman. We will now hear from Santa Ana.

Mr. Tedford. I can say for the city of Santa Ana that we have been moving right along in a progressive way for the past year. We own our own water system there. We have acquired the whole block for the pumping station and all. We have established an air compressor there that cost about \$4200. We have

extended our water mains about three miles this last year, and accepted a bid for about 2600 feet of six inches and about 1880 feet of four inch pipe to be put in between now and the 1st of January. We have about 33 miles of water pipes now laid. We have about 20 miles of sewers, and this last year we bought 40 acres more adjoining our old sewer farm, which gives us about 75 acres. During the last summer, the people along the sewer line have used practically all of the sewage; I don't think our sewage has reached the farm in the last six months. We have put in quite a lot of side walks during the year. We have now under contract, about 5 miles. Our people take quite an interest in fixing up the streets and side walks. They are just furnishing up a little Carnegie Library there at a cost of \$15,000. We have established a Rest Room there. The people coming in from the country can go there and sit down and wash themselves and read, or ladies with babies or children can go there and attend them, and it has been found very convenient indeed. We think it is a very nice thing. We are going to take up the matter of tree planting on the first of next year. There will be an ordinance passed specifying the kind of trees to be planted on certain streets, and we have given out notice of that, and property owners are requested to notify us or correspond with us stating what kind of trees they want planted on certain streets, so that they can have the trees uniform on the different streets.

Mr. McCabe. I would like to ask the gentleman something about the sidewalks and the trees. Are the trees to be in the sidewalks?

Mr. Tedford. It depends altogether on the width of the streets. We generally put down a six-foot sidewalk. The trees are put inside the curb, between the curb and the sidewalk.

Mr. Fowler. Have you any trouble with pepper trees, putting them right alongside of the sewer line?

Mr. Tedford. We did when we first put them in we put the trees very close to the sewer line, but they only interfered a very little. I think that was exaggerated a great deal. In some cases we took out the pepper trees and put in nice ornamental trees.

The Chairman. We will now hear from Bakersfield.

Mr. Lightner. Most of our improvements during the last year has been in the way of street work and school buildings. We bonded the city for \$40,000, which is its entire indebtedness, and with that we have built a new school building and added a modern addition to one of our older buildings. We now have three grammar schools and a high school in Bakersfield. Our street work has been in the way of grading, oiling, sidewalking and curbing. Whenever we have a street prepared now, we also have it oiled. We have within the last year put in from  $2\frac{1}{2}$  to 3 miles of such streets. Our sidewalks are of cement, six feet wide, and our curbs are of redwood, with cement at the turns. The average cost of them per square foot is something like 11 or 12 cents—the sidewalks—and we have in addition to that put in new wooden crosswalks. We have bought us a new steam engine and a new hose wagon, and hose for that; and have a paid engineer, chief of the fire department and driver for the steamer and for the hose wagon. Our assessment roll this year has increased about  $\frac{1}{2}$  million dollars over what it was last year. Our rate of taxation is \$1.06 on the \$100. We have no public ownership of water works or anything of that kind. We buy our water from the water company there, and pay about the lowest water rate in California. As a sample of the expense, in my property we have a frontage of 152 feet and we sprinkle continuously day and night, if we desire, with the hose, and have a house and modern water closets, a barn and a place to water stock, and everything a person needs, and it costs me \$2.40 a month for

the use of the water. We have borne the unenviable reputation of being a pretty tough town down there, and I guess we deserve it, as we have permitted gambling and all sorts of devices day and night. But our new sheriff, who has taken the reins of government into his hands, has published an article in the papers stating that he was going to stop gambling and restore a better state of affairs there. It is now a well understood fact that the gamblers must go from Bakersfield after the 1st of January. I do not know that I can think of much more to say concerning our affairs. I did not prepare any report on this occasion, which I should have done.

The Chairman. We will now hear from Redlands.

Mr. Fowler. I am sorry that I cannot report as much improvement as I had expected to. Last April we voted \$50,000 bonds for street improvements. The bonds were advertised, properly executed, and were sold, and we had made our calculations to go to work improving the street. But the next thing we knew the Redondo Beach case was decided, and we did not want to buy a law suit. This had reference to the bids. When we took the bid of the second bidder from Chicago they looked the matter up and we sent on all the papers they required, everything perfect, and in the meantime they sent out here their attorney to look up the matter, and reported that they did not want the bonds. So we have got the \$50,000 in bonds executed and in the hands of the treasurer, but we haven't the money. The most local improvement that we have had on hand during the year is the oiling of streets, and of that I have already told the convention. We have built a \$5,000 fire engine house, and have laid several thousand feet of sewer pipe. I do not know how many feet or how many miles we have curbs and gutters, it is all made of granite rock. We do not own any water. We have an option upon our local water company's system



which has not given good satisfaction to our people, and they have been sick of it, and are sick of it. We have a committee appointed to investigate sources where we can obtain the best water coming from the mountains, and I learn that within a few days they will be able to make a report that the people will probably be satisfied with, and then we shall vote bonds to get the water system. Again we elected a board of free holders and they have formulated a charter and we shall very shortly have to vote upon that. We have had four elections down there this last year and we will soon have two more. Our tax rate is \$1.03. Our assessment has in the past year increased one million dollars, the total assessments being now \$5,000,000. We hope very soon to have our own electric lighting plant, because our water system, is a gravity system, and we have pressure of 70 pounds to the square inch.

The Chairman. Petaluma is next in order.

Mr. Nisson. The greatest improvement that Petaluma has made in the last year has been in the improvement of streets and sewers. During the next year we expect to make a great many improvements. We have about 52 arc lights, an all night system and every night at a cost of \$7 per month per light. We have plenty of water and good water.

The Chairman. Watsonville is next on the list.

Mr. Trafton. We have extended our water system, to the new streets, probably building about 1600 additional feet of sewer and we have macadamized the lower portion of our main street. At the present time we are changing our lighting system. We are using 2,000 candle power arc lights on our side streets and we are changing those for incandescent lights. We are paying \$7.50 a month for the arc lights, and we have made arrangements with the

water company so that we will get 12 incandescent lights for each arc light, and we think it an advisable change. It has given better satisfaction. The crowning act for the past year has been the adoption of a Free Holders charters which will be submitted to the next legislature. About three years ago when we made our plans for our sewer system we had plans drawn for a water system at the same time. The water company came before the board of trustees and asked us what would stop the proposition. We told them water for all public purposes free, for the sewers and fire and everything. They laughed at the idea, and said no private water company had ever done any such thing as that. We told them we were not asking for it, but that we were going ahead to build our own. So we went ahead and had our plans all drawn, and we were about to call an election on the proposition for sewer and water bonds, and they saw we meant business and came to us and wanted to take up our proposition. We had agreed to accept that proposition, and so we took their offer and today Watsonville is receiving from a private corporation free water for all public purposes, and we are using it without stint.

The Chairman. Let us hear from Nevada City.

Mr. Chapman. As Nevada City was not represented at any of the previous League conventions, we have not come here prepared with a written report. I will therefore make a short oral report. Nevada City works under a special charter. We have five trustees. We elect our marshal and pay him a salary of \$50 a month. We pay him five per cent of the taxes, and three per cent of the licenses. That is about an index of the way our town officers are paid. We have a driver of a garbage cart to whom we pay \$50 a month. The city was bonded for \$57,000, and issued 6 per cent bonds, with which we purchased

our water system in 1897. We have mortgaged the city and issued 6 per cent bonds for \$23,000 for a sewer system. There is a tax levied of 57 cents to pay for these serial water bonds and their interest. That goes into the various funds for the payment of bonds and so on, but not one penny of tax is levied for municipal purposes. That is the result of municipal ownership with us. In 1900 we were about \$1300 in debt. The water system cleared that debt in that year and the year following, and we have at the present time in our treasury between thirteen and fourteen thousand dollars. We have it in mind to build a bridge costing between ten and eleven thousand dollars without cost to the city. We maintain a library at an expense of \$125 a month. This library was established by popular subscriptions, and we will continue to maintain that, pay all of the salaries, and other municipal expenses, from the profits of our water system and from the license taxes which amount to about \$2,000, and which is derived from licenses on saloons entirely, almost entirely; perhaps we collect \$150 or so license on peddlers in a year. I will say that the city buys its water at so much per miners inch, buys the whole supply. We pay sixteen cents a miners inch for the water. Our water system is a gravity system. We have retaining reservoirs on each side of the town, and large mains leading from each one, which results in a constant pressure of that system from both sides, and we ever have a sufficiency of water in the main, so that we are perfectly protected as against fires. Our pressure will average 180 feet I believe, and we have up to 230 feet of pressure. We use the Gamewell fire alarm system, and have eleven boxes, and it is our policy to add say one box a year to that system.

The Chairman. We will now hear from Visalia.

Mr. McCabe. Mr. Chairman, as the

city engineer of Visalia, I came here to learn rather than to impart information. However, I will say that Visalia, which as you all know, is a very old town, though she has been asleep for many years, is now thoroughly awake, and all sorts of improvements have been and are being made. We have gone into the matter of street improvements very largely. We have adopted the concrete bituminous system, and find that we get an excellent adhesion between the two substances and that it works very well indeed. We have voted \$80,000 of bonds for a complete sewer system. In planning our system we have departed somewhat from the plan usually adopted, especially in the San Joaquin Valley with reference to the grade of the sewer. Generally you will find that the grade is made for the purpose of a gravity outflow. We have departed from that, to this extent, that we sacrifice our surface outflow and put in a pumping plant for the benefit of our grade. So we have a grade in our system sufficient so that the flow in every case will be not less than two feet per second. In this way we are guaranteed such a flow of water as will keep our sewers clean, and do away with the necessity of having to contract the large sewers or in any way interfere with the small ones, to clean them out. We have flush tanks at all dead ends. Our disposal of sewage is also somewhat different from other systems. In this we have taken a rather independent stand. We know it is customary for most cities, either to have sewage farms where they spread sewage out or to use septic tanks. With us we have what we call an intermittent filtration system. We have purchased ten acres of land well adapted to the purpose, part of it being of coarse sand, and the other part of very good soil. Our pumping plant is located at the lower end of our system, and in connection with our pumping plant we have what we term a screenage tank.



This screenage tank is so arranged that we pump the water from the sewer into one department or chamber of the screenage tank, and from there it flows down into a second department, and from the second up into the third, and in going from the second to the third, it passes up through a layer of screens, these screens made of  $\frac{5}{8}$  inch iron, with  $\frac{1}{2}$  inch spaces between them, so that nothing over  $\frac{5}{8}$  of an inch thick can pass through the screens. The solid matter settles to the bottom of the screenage tanks, and when it is collected to a sufficient depth, with an injector pump we force this through a pipe to the lower end of our disposal ground, and there it is spread out on a layer of coarse sand. In warm water, it will dry up in a few minutes. In winter we just cover it over. So we are secure against any possible odor from our sewage disposal.

The Chairman. We will now hear from Chico.

Mr. Clark. We have bonded the town for \$45,000 to put in a sewer system, and have put in a system of about 14 miles. Our sewer farm is about  $3\frac{1}{2}$  miles from the city to the sewage farm. The farm contains about 76 acres, which cost us nearly \$7,000. We have a pumping plant that we installed that cost us about \$3200 or \$3300. We have a tank that holds 15,000 gallons, and we run that with a two horse motor plant. We pay \$12 a month for that power. We pump about 50,000 gallons in 12 or 14 hours. We shut it down at night, and this tank supplies the flush tanks, of which we have about 50, with water, until we start the pump the next morning. Everything about the farm is working finely.

The Chairman. We will now hear from San Leandro.

Mr. Lynch. I am sorry to say for San Leandro that we have not been able to do a great deal of work, from the fact that we have a great deal of opposition and have had in our town to

the raising of a proper tax rate for the purpose of making improvements. But this year we have taken the bit in our teeth and have raised the assessment, which is ordinarily 65 cents, and we expect to do some work. This past year all we have done is to make up a little bit of macadamized streets, and the next year we are going to do a little more in that direction. In regard to lights, we are in the experimental stage as far as electricity is concerned. We are now using about ten lights provided by the Standard Electric Light Company, and we think soon of adopting a system for the whole city. I hope to report better things to you next year.

The Chairman. Modesto is next in order.

Mr. Broughton. We have not done very much new in the last year. We have our own water system and a good sewer system, and we water our streets. They do not need macadamizing. Modesto is very glad to say that all litigation has stopped over the irrigation system, for you know that we must live by irrigation down our way. I think we shall go right along in our municipal work, and, although a little town, I hope we may be able to make a good report to you at the next meeting.

The Chairman. Let us hear from Sonora.

Mr. Knudson. We are a city of the sixth class. We put in last year sixty incandescent lights, for which we pay 60 cents a month each. We have spent on our streets about \$7,000. There is nothing else that I have to report.

The Chairman. Let us hear from San Mateo.

Mr. Kincaid. Mr. Kirkbride has been compelled to return home, and he desires me to say that within the last year San Mateo has built three bridges at a cost of \$30,000 and has also built a complete fire alarm system, and I think some other things, though I believe those are the principal improvements of San Mateo during the past year.

For Redwood City I would say that our improvements for the past year have been made more in the nature of street improvements than anything else. We have been fortunate there in having organized a live, up-to-date improvement club. They are taking hold of things systematically, and intend to take up one line of work and push it through, and then take up another. Though street work has been the particular line taken up during the last year. All of our work has been done under the new Act of 1901, and it has been found to be quite satisfactory. We have our own water works, and during the past year we bored another well, but we now wish we had our money back, because we have nothing but a hole in the ground. Another movement that has been inaugurated has been one to see that our ordinances are enforced. It has caused considerable consternation among some people but we are trying to enforce every ordinance on the statute books.

The Chairman. We will now hear from Los Gatos.

Mr. Robertson. As you may know, we had a fire in Los Gatos a little over a year ago, and I think it was a good thing for the city. We have had a lot of new buildings built, and it gave us a chance to straighten up our main street and regrade. We have codified the ordinances there, and we increased saloon license from \$200 to \$400 a year. The railroad company has given us a new railroad service there, and have fixed up around the depot and made things very pleasant. The old telephone system was all burned down by the fire, and we have had a new one inaugurated there. The telephone rates now have been reduced more than one half. We have a new Carnegie library in process of construction, and we expect that will be completed within 30 days, at a cost of \$10,000. We have no bonds, and our taxation both state and county is \$1.85. We had an

election within the last year for bonds for sewer and street and electric lights and park purposes, in amount \$40,000 of bonds, but the bond issue was killed. We have no debts whatever.

The Chairman. Sausalito is the next town on the list.

Mr. Crumpton. Sausalito is a little town just across the bay that is a sort of a sleeping room for San Francisco. We have inaugurated some little improvements there, got up a salt water plant and watered the streets with it, and we have a lot of rock in the hills there, manganese with quartz in it, and sprinkling that with salt water makes a splendid street. As to saloons, in the course of time Sausalito got to have more than its proportion, I think. I believe there are about thirty saloons there now, and I don't know how many hasheries. They come pretty near to running the town. The result is in one direction that saloon licenses have been cut down to a very low figure. I have been much interested in the proceedings of this convention, and I hope by the time another year rolls around, we will be able to make a good report for Sausalito.

The Chairman. We will next hear from Saint Helena.

Mr. Bruck. Our present Board has made a point of expending its money for permanent improvements. It has built a very fine stone bridge there, and we expect, in time to have one of the prettiest towns in California, Southern California not excepted.

The Chairman. We will hear from Yreka, Trustee Turner.

Mr. Turner. Within the last year, Mr. Chairman, we have completed our sewer system. We have also sold our bonds, bonded the city for \$55,000 and sold them to a Chicago firm. Three of those bonds mature each year, \$500 each and the last in the year 1939. We have also bought a city team and ploughs and harnesses and wagons with which to improve our streets. We have



got a number of other things which we contemplate doing, but owing to lack of time, I will not go into details at the present time.

Mr. Clark. What rate of interest do your bonds draw?

Mr. Turner. Five per cent.

Mr. Clark. And what premium did you get?

A. We virtually did not get any premium; we got enough premium to cover the accrued interest.

The Chairman. Paso Robles is in order, if there is some one here to report for her.

Mr. Dresser. I have very little to offer, Mr. Chairman. The principal improvements in the last few years have been in the way of setting out trees. We have made quite a success of that, with the assistance of the improvement club, and if I had time I would go into details. We naturally have good streets down there, and so we have no difficulties to contend with in that direction. We have a park that covers two blocks of land which is occupied by the city, and it is as nice a park as I think there is in San Jose. I think I have nothing further to report.

Mr. McCabe. Will the gentleman kindly tell us how they set out the trees?

Mr. Dresser. Mr. Chairman, the way we set out those trees is simply by passing a resolution at the request of the improvement club that we set out so many trees, and that they be set so far apart, and that the property owners repay the actual cost of those trees, and the city would set them out and care for them for two years. In our country of course we have to water them too. I think we have watered them about three times during the summer, and each time we dig around the tree and make a hole and fill that hole up with water, and then after it sinks in a little, throw the dirt back over it.

Mr. McCabe. Does your club con-

sist of ladies and gentlemen, or which one if but one?

Mr. Dresser. Of both, but the gentlemen do the business. We have a very active little improvement club, and it is a great help to us.

The Chairman. Has Vacaville any report to make?

Mr. Corn. Mr. Chairman, it is getting so late, and I am not in position to make any report to this convention that will be satisfactory, and I would prefer to have a written report prepared and sent to you and published with the others, if that can be done.

Mr. Chairman. I believe Calistoga is now represented.

Mr. Armstrong. Mr. Chairman, since the very disastrous fire which we had in Calistoga, destroying mostly the entire business portion of the town, including town property and fire apparatus, the town has been rebuilt more substantially and I think I can say that the fire has really done the place good. It is in better shape than ever before. New fire apparatus has been purchased, and a free public library has lately been instituted. We obtained that by the united action of the improvement club, consisting solely of ladies, and their work is very good, and having a good effect upon the community. Our work has been chiefly in the construction of buildings and street work, including some oiling, which has not been very satisfactory, probably from lack of experience. We have indulged in stone sewers and water ways, some of them quite expensive, and contemplate some more. Napa county has more stone bridges than any other part of California; in fact as many as all the rest combined. We are encouraging the planting of trees, but we do not plant evergreens, but maple and walnuts, so as not to keep the roadways so damp. We have largely used walnuts and they do very nicely.

The Chairman. Can we now hear from Suisin?

Mr. Eagar. Suisin has macadamized two streets, 1082 feet long at a cost of \$3200, and the other is 907 feet long and 28 feet wide, between curbs, the cost of the latter being \$648. We also have expended about \$625 on some other streets, and are now under contract for work aggregating over \$13,000. We have been very much interested indeed in the experiences of other towns in macadamizing and oiling streets. I am prepared also, Mr. Chairman, to make a report for the little town of Rio Vista. Rio Vista has just completed a system of municipal water works, which cost about \$20,000. They have placed a tower on the hill inside the town limits, 40 feet high, and two 50,000 gallon tanks and the water is pumped from the river with a small pumping plant. They have put in cast iron pipes. When the tanks are full, they are at a height of from 80 to 130 feet above the town. The stream can easily be thrown over any building in town.

The President. Ventura is next on the list.

Mr. Collins. During the past year we have oiled a number of our streets, the result has been very satisfactory to our citizens. The streets were prepared for the oil according to Mr. Fowlers plans. On January 26th our people will vote on issuing 47,000, 5 per cent bonds, if carried the money will be used for putting in storm sewers improving city hall and making cross walks. Many of our county roads have been oiled and we find that it is the best and cheapest way of keeping our roads.

#### **Franchises for Competing Telephone Systems.**

Mayor G. S. Edwards of Santa Barbara. I should like to hear some discussion upon the subject of competing telephone systems. We have an application for a competing system in Santa Barbara, and I would like to find out what the other towns have been doing in such matters.

The President. Is there anyone here representing a city that has a competing telephone system?

Mr. Fowler. Redlands has granted two franchises to telephone companies.

The President. Have you two systems in operation now?

Mr. Fowler. No, we have not.

The President. Perhaps there is some city represented where competing lines are in operation. If so, we would like to hear from its delegates.

City Attorney Brown of San Jose. San Jose has not now two competing telephone systems, but it did have at one time. First we had the old Sunset Telephone Company, the one that extended its wires all over the State, and afterwards the People's Line came, and we gave them a franchise. They installed perfect system and it continued to be such as long as it was in operation. Eventually, however, the Sunset Telephone Company bought them out. So far as its operation upon the city was concerned, it simply resulted in every business man being compelled to pay for two telephones instead of one as before; that was all there was to it. Half the people would take the People's telephone and the other half would take the Sunset. It was followed by a reduction of rates. Since the Sunset people bought out the other line, we have had an office rate on a party line of \$2 a month. This reduction was caused possibly by the competition, but while they were both in operation, as I say every business man had to have two telephones in his place of business, and it was simply a nuisance. If the people can make it a municipal affair, or take hold of the matter and control the rates to be charged, there is no use in duplicating systems. But if high rates cannot be controlled in any other way, there might be an excuse for two franchises; but even then it is a double expense, unless the competition reduces the rate sufficiently to allow two telephones to be maintained.



The Secretary. There was a proposition to put this very subject on the program for discussion, and I asked several cities whether they would like to have it discussed, but I did not get any direct response from any of them, and in the meantime I learned that applications for franchises for an independent telephone system had been generally refused by the cities, so that I thought it would be to some extent a waste of time to discuss the matter. The Board of Trustees of Fresno first took up the matter and presented a very exhaustive report, and, following their lead, I think nearly all the cities, with the exception perhaps of Redlands and San Bernardino and Visalia, have refused to grant a franchise, at least temporarily. The experience of those cities that have had two telephone systems was not, so far as I have been able to learn, altogether satisfactory.

Mr. McCabe. Visalia has had a little experience with the telephone. A short time ago we gave a franchise to a competing company, since when the company reduced our rates from \$1.50 to \$1.25 in residences. And another great advantage was the installation of a rural telephone system, so that now the entire rural district about Visalia is connected by telephone, the rate for which service is, I think, 50 cents a month.

A Delegate. Do I understand that you have now in operation in your city two competing telephone systems?

Mr. McCabe. Yes.

A Delegate. How do you manage it? Are you subscribers for both lines?

Mr. McCabe. The new company has not been in operation long enough as yet to tell.

Mr. Armstrong. I have some familiarity with telephone matters, and that experience leads me to think that it is not advantageous to have two telephone systems in a city. In Napa, for instance, the rates for telephones is only \$1.25 per month, without any compe-

tion, and the still smaller places pay a little in advance of that figure. Where two exchanges are established, they generally abandon one of them. They usually want to have connection with the outside world, and so the Sunset generally has the preference. So it generally results in the use of two telephones by each business house, or the abandonment of the other one altogether.

Trustee C. D. Johnson, of Santa Rosa. I would like to ask for information if the council or trustees have not the right to fix telephone rates the same as water rates. I understand that the city of Eureka has made an ordinance, and they provide that the company shall only charge a certain amount on certain lines, from one to ten-party lines. I would like to ascertain whether that is legal, or not.

The President. I think the matter is under the control of the trustees.

Mr. Edwards. I will state that in the charter of Santa Barbara there is a provision that the council shall be permitted to fix the rates. The franchise of the Sunset Telephone Company expires in Santa Barbara in about two years. They asked for a ten years' extension. A new company comes in and asks for a 50-year franchise. I was instructed by the Council at the time this matter was taken up to correspond with the various cities, which I did, and I likewise corresponded with Portland, Oregon officials and those in other places, and got all the information that could be gained from cities where two systems have been in vogue, and the answers from everywhere were unfavorable to the proposition. Still, this matter has been coming up before our Council for the last three months, and we were instructed to see if some discussion could be had, or something done, with references to the matter, so we could go back from the Convention to our city better informed. Since I have come here, I have talked

with several delegates, and I find that most of the cities have been asked for a franchise have refused it. I have a list of them here, or at least part of them. It comprises Berkeley, Fresno, Madera, Porterville, Riverside, San Diego, Spokane, Bakersfield, Pasadena, Alameda, and Eureka. Most of these cities have been asked for a franchise for a double system.

Mr. Turner. Merced has not been asked to grant a second franchise to a telephone company, but it has been rumored that the agents of a second company would be there, and we turned it down before we were asked, notified them through the press that they need not come to Merced. We have a local barbed-wire telephone at our place, and that is spread out through the farming community, and you can telephone to the farmers whenever you wish, and even use the company's telephone poles.

A Delegate. Why do you call it a barbed-wire telephone?

Mr. Turner. Did you never hear of a barbed-wire telephone? They have them all through the western States.

The Delegate. I wanted to understand if you really used the barbed-wire, and, if so, why?

Mr. Turner. They take a fence and run it all over the country, and talk to anybody. We have them all through the country there, but of course, that amounts to a private line.

The Delegate. That is to save the expense of another wire?

Mr. Turner. Yes. Then about the rates. They have reduced the rates in Merced. It used to be \$1.50 for residences and for business places. But we heard that Fresno had gone after them to put the rates down and had succeeded, so we struck the company for a reduction, and they told us that if we would take 40 more phones, they would put it down to \$1 for residences, and \$1.50 for business. I think instead of getting 40 got 60 or 80. In fact, we have lots of telephones, scattered all over the country

there. One company is a good thing, but I think two would be too many.

### The Assessment of Franchises in California.

To an organization such as this, having as its object the improvement of city government, and the consideration of municipal finances, anything bearing upon the question of municipal revenues, must challenge your attention. Indeed, in view of the rapid growth, and the ever increasing disbursements of American cities, the subject of "municipal revenues" is becoming a question of leading importance.

Rapid as has been the increase in population of our cities, it has not kept pace with the increase in the expense of maintaining our city governments. Perhaps the chief reason for this, lies in the fact, that our conception as to the duty and functions of civic government, has materially changed. Our citizens now demand expenditures in the interest of their health and comfort, as well as for the protection of their property,—which, a few decades ago, would have been regarded as unreasonable. Numerous disbursements in connection with municipal administration which would have appalled our fathers, seem to us, not only reasonable but necessary. With the growth of civilization, these expenditures will inevitably still further increase. As a result of these changed conditions, the burden of taxation in our cities, has necessarily become steadily greater.

A few facts in this connection will illustrate in a most forcible manner this tendency.

Let us take the City of New York as an example. Its population today, is about the same as was that of the entire United States at the time this country came into existence. Yet, while the City of New York expends today about \$100,000,000 a year, the National expenditure at the time referred to, was only about \$4,000,000; and even during



the first decade of our National existence, our expenditures averaged only about \$8,000,000 a year. New York City in 1800, with a population of 60,000 souls, spent a little over \$100,000 a year. A hundred years later—in 1900—her population had increased sixty fold, but her expenses had increased over one thousand fold, and the same ratio of increase is observed in other cities. Now what has been the result of this enormous increase in municipal expenditure? The result has been, an ever increasing burden of taxation, and as this burden, under existing systems of taxation, as enforced, has fallen almost entirely upon real estate, it has frequently awakened violent opposition, and a clamorous demand for retrenchment from the owners of this class of property. As our expenses, however, are bound to increase, with the ever growing demands of modern civilization, it becomes necessary to distribute this burden on all classes of property alike. The present restricted field, from which our taxes have been gathered, this being chiefly realty, must be enlarged. Property which has heretofore escaped adequate assessment, must be listed on our assessment rolls. All American cities are feeling the necessity for such relief, and many have, in the past few years, through special legislation, designed to enforce contributions in the way of taxes, from that class of property, which had been escaping its just share of taxation, found the relief which had become so urgently needed. The City of New York, for instance, recently forced through the State Legislature, a bill known as the "Ford Franchise Bill," which has added to the assessment roll of that city the sum of nearly \$100,000,000, this representing an increase in the assessment valuation of franchises alone. This legislation was prompted by a clamorous demand of the owners of city real estate for relief from their constantly increasing tax burdens, due to the rapid

growth in municipal expenditures.

This brings me to the consideration of the conditions existing in our own state. Our owners of realty, would as gladly welcome such relief. Fortunately, however, the constitution and laws of California as such that it is unnecessary to resort to any further legislation, in order that all classes of property may be equally subjected to taxation. Yet, strange as it may seem, although our laws on this subject have, for nearly a century and a quarter, provided for, and indeed made mandatory the assessment of franchises, and similar classes of property, represented largely by corporate securities, no attempt, until recently, has been made to put these laws into operation. They have lain dormant and inoperative for years, with the result that practically the entire burden of taxation in this state and the cities thereof, has fallen upon one class of property only, and that chiefly land. What an injustice! What a sad commentary on official incompetency or or worse, on the part of those whose sworn duty it is to enforce the laws of this state, relating to the assessment and taxation of property. Our amazement is only increased when we recall the fact, that the demand on the part of our people for a new state constitution in 1879, arose from the wide spread conviction that intangible personal property in this state was escaping taxation, and the determination on the part of our people, that this condition should be remedied. In accordance with this demand, our constitution as adopted at that time; gave to the term "property" the most comprehensive definition to be found in any of our state constitutions. It declares the word "property" to "include moneys, credits, bonds, stocks, dues, franchises, and all other matters and things real, personal and mixed, capable of private ownership." The Constitutional Convention which adopted this definition of property, inaugurated nothing new in its system of taxa-

tion. As early as 1819, the United States Supreme Court had declared that a franchise of a private corporation was property. The same supreme authority has in repeated decisions in since that early date, held that the capital stock, franchises, and all real and personal property of a corporation are justly liable for taxation, and it has declared that a rule which ascertains the value of a franchise by taking as a basis for the valuation of a corporation's property, the value of its funded debt and shares of stock, is as fair as any other. Let any one who disputes the fact that our state constitution makes mandatory the the assessment of franchises of all corporations, both of a public and private character, read the debates of the Constitutional Convention, when this subject of "franchise taxation" was under discussion, and thus clearly learn the intent of its language and he will be forced to acknowledge that he is in error. Our Constitution makers expressly declared the intent, in these debates, of assessing the property of all corporations, their franchises included, on the base of the value of their capital stock. Our Supreme Court, in interpreting our state constitution, has uniformly upheld this view, not only in the instance of assessing the franchise of quasi-public corporations, as was decided in the case of "San Jose Gas Company vs. January," 1881, but also in the case of the assessment of franchises of private corporations, as in the case of "Burke vs. Badlan," and in the case of "Spring Valley Water Works vs. Schottlers." ( 62", Cal. 69.)

Notwithstanding the plain language of our constitution on this subject, and the fact that our Courts have given a long line of decisions, plainly interpreting its meaning, and upholding the correctness of the principle involved, this class of property, amounting in the aggregate in this state, to probably several hundreds of millions of dollars, has re-

mained year after year practically untaxed.

When I assumed the office of Assessor of the City of San Francisco in the year 1899, the highest assessment of a franchise of a private corporation was a few hundred dollars, and the highest franchise assessment of a quasi-public corporation was \$4,000,000. To-day these amounts have been increased from a few hundred dollars to \$750,000, in the case of a private corporation, and from \$4,000,000 to \$15,000,000 in that of a quasi-public corporation; while in the aggregate the increase in the total assessed value of franchises, has amounted to many millions of dollars. As might be inferred, such assessments met with violent opposition. They were denounced as illegal and unreasonable, and as calculated to drive capital out of the city; and an appeal was taken to the Courts to determine the legality of such assessments. This litigation questioned the legality of the assessment of the franchise of private corporations, and also that of the franchise of a corporation foreign to this state. Quite recently a number of decisions have been handed down, which definitely decide the questions at issue. Both our own state courts, and the United States Circuit Court of Appeals, have decided that the laws of the State of California demand the assessment of franchises of this character. Not only does the recent decision of the United States Circuit Court declare that the franchise of a bank is property under our constitution and as such is taxable, but it also decides that the franchise of a foreign bank, incorporated in Great Britain, is taxable within this State, on the basis of the volume of business transacted within this State, and the profits arising therefrom.

Time does not permit me to notice or call to your attention, all the specious and ingenious arguments employed, to combat the levying of such assessments; such as, that, as a bank has no exclus-



ive privilege, its franchise carries nothing of value, and is not property—that as anyone can secure such a franchise for \$25, it can acquire no greater value; and other arguments based upon the misinterpretation of the meaning of the word franchise as used in our constitution and statutes. All of these, and other objections are swept aside in the clear reasoning of the high court referred to.

In view of these decisions, there cannot now exist any doubt as to the plain intent, and meaning of our laws on this subject. The laws properly enforced will enable assessors to compel that vast amount of property represented by corporate securities, to contribute its quota toward the support of the government. We all know the propensity of the owners of this class of property, to evade taxation thereon. A law, such as ours, which taxes the values, represented by these securities, to the corporation as "franchise," rather than to the possessor of these securities, in the shape of a direct tax thereon, collects the tax at the fountain head. The tax must inevitably be paid indirectly by the owner of these securities, through the lessened dividends which he receives on his stock. This method has many advantages over that which was formerly in vogue in this state, viz., that of taxing the value of the corporate security directly to the owner thereof. In the first place, the tax is easier of collection, and the expense of its collection is less. In the second place, the owner of a given stock cannot escape the tax thereon, as he easily could, were it assessed directly to him. In this latter case, the tax is readily evaded through a false transfer of ownership, to a party beyond the jurisdiction of the Assessor, or through direct concealment of these securities.

Our system of assessing the franchises of corporations, in order to reach the holder of the securities of these corporations, is identical with the system of

taxation, that is in operation in the state of Massachusetts. As was stated by Prof. Taussig, of the Department of Economics, in Harvard University, (in a correspondence which I had with him on this subject), "such a mode of assessment of domestic corporations, has been in force in the state of Massachusetts for many years," and he adds further, "that the taxes so levied on franchises are paid without complaint, as part of the accepted order of things." I may add that for the reasons previously stated, Prof. Taussig is a strong advocate of the system of taxing the values, represented by the corporate securities, to the corporation direct, as a franchise tax, rather than to the individual stockholders, as a direct tax on their securities.

Now that the law in this state, regarding the assessment of such property is established, beyond the peradventure of a doubt, consider for a moment, what a vast field of wealth, hitherto untaxed in this state, is opened up to our Assessors. In view of the necessity which has heretofore been referred to, of relieving one class of property, viz., realty, from the ever increasing burden of municipal taxation,—may it not be hoped that our Assessors throughout the state will take advantage of the opportunity now presented, of affording this desired relief, and if they fail to do so, will our City Councils and Boards of Supervisors, (which are so largely represented here to-day), do their duty, unless they, when acting as Boards of Equalization, compel Assessors to properly and adequately assess this class of property. It occurs to me that this organization has it within its power to accomplish this result. If it would draw the attention of the public to the shortcomings, so frequently manifested by some of our public officials in this matter, such action could only be productive of good results. This might make less frequent the spectacle of a County Assessor violating his oath of

office, in refusing to obey the mandate of our state constitution, (which he has sworn to do), or to be guided by the decisions of our Courts, when he refuses to assess a valuable franchise, because, forsooth, in his poor judgment, he does not consider it "property." I am not prepared to say that it would not be a good policy, if our Legislature should establish by means of an explicit statute, a more or less definite method of arriving at the assessible value of any given franchise. Such a provision would, at least, compel the official who is ignorant of his powers, under the law as now clearly established, to exercise these powers, so that, in some adequate manner, property of this class might be assessed. In fact, at the last session of our Legislature, such a bill passed both branches of this body, but failed to receive the signature of the Governor. This association might well, in my opinion, give this subject some serious consideration.

While on the subject of Legislation, there is one other matter, to which I desire to draw your attention. The law as it now stands, provides that a corporation doing business in two or more counties of this state, shall be taxed for its franchise, in that city where its principal place of business is located. This "principal place of business" being defined to be, not necessarily that locality in which its works may be located, but that place in which its "office" as stated in its articles of incorporation, is located. This law is responsible for some occurrence to which I desire to call your attention. Several large corporations of this character, having been taxed by me in the City and County of San Francisco upon their franchises, cast about until they found an Assessor in a neighboring county, whose views did not agree with our state constitution, and then immediately removed their office (this, under the law, constituting their "principal place of business") into the jurisdiction

of this official. Such was the action of the Sunset Telephone Company, and the California Powder Works. By this action the wealthy shareholders are protected from any adequate or reasonable tax on their securities. Some legislation should be adopted which would prevent the possibility of such occurrences. Such corporations could better be taxed for their franchises by the state authorities. The result of such a practice would be to add largely to the state's revenue, and thus indirectly lessen the taxation upon realty, throughout all the counties of the state. In a number of Eastern states the farmer has been relieved of all taxation on his land, for state purposes,—the greater portion of the state's revenue, being collected from corporations and the remaining portion being collected in the shape of licenses, fees, fines, collateral inheritance tax, etc.

In conclusion, I desire to state that organizations such as yours have frequently, in Eastern states, made a successful fight for the enactment of such laws as would compel the owner of corporate securities, to pay some adequate tax on the values represented thereby. May it not be hoped, that this organization, may interest itself in seeing that the laws we now have in this state on this subject, are enforced.



### Notes.

Vacaville is making plans to erect a town hall.

Visalia's new sewer system has been completed and accepted.

Work on the new Carnegie library at Santa Rosa has been commenced.

Long Beach voters have approved a bond issue of \$35,000 for sewers.

Berkeley has adopted an ordinance providing for the election of a city auditor.

Vallejo is the recipient of a \$20,000 donation from Andrew Carnegie for a library building.



# An Economical Street Lamp



The city of Vallejo, Cal., is paying \$8 50 per lamp per month for eighty electric arc street lamps or a total of \$8,000 per year. With the MERIDEN HYDRO-CARBON ARC LIGHT the city of Vallejo could be lighted for \$1,039 for material and allowing for attendance \$1,500, an amount far exceeding what it should cost, would make the cost of lighting \$2,539 per annum, which shows an annual saving of \$5,500, or a sufficient amount to build each year a new school house or go far towards paying the cost of educating the children of that city.



The city of Benicia is paying for fifteen electric arc lamps the sum of \$12 each per month or \$2,160 per year. With the MERIDEN HYDRO-CARBON ARC LIGHT it would cost for material \$200, for attendance \$300, as it will take a man but two hours per day to attend to a plant of this size, making a total cost per year of \$500, a saving of \$1,600 per year and a far better light.



The city of Sonoma pays for twenty-five 32-candle power lamps which give them but 600 candle power per night the sum of \$600 per year. With the MERIDEN HYDRO-CARBON ARC LIGHT they could have ten lamps giving 16,000 candle power per night at a cost of \$130 per year including attendance not over in all \$100 per annum, a saving of \$400 per year and over 15,000 candle power per night.



The company would be glad to give to those interested the names of eastern cities now exclusively using this light, also the names of parties who have factories and stores lighted with this system.

## Meriden Hydro-Carbon Arc Light Co.

OF CALIFORNIA

819 MARKET STREET

Room 29

SAN FRANCISCO, CAL.

SAN FRANCISCO  
PUBLIC LIBRARY

# CALIFORNIA MUNICIPALITIES

Vol. 8.

FEBRUARY, 1903.

No. 1.



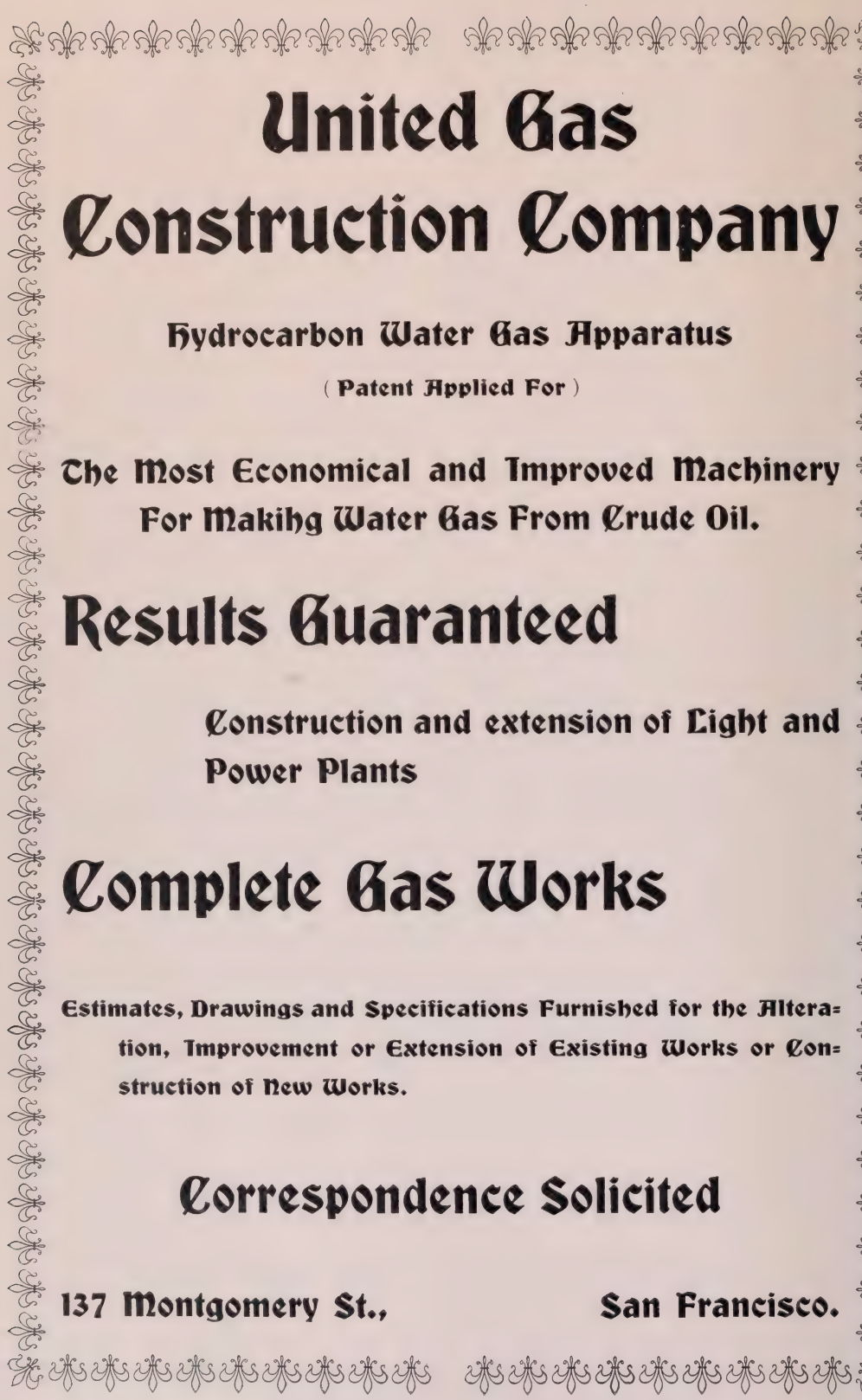
CACTUS GARDEN, RIVERSIDE PUBLIC PARK.

SAN FRANCISCO OFFICE . . . . .  
ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.





# **United Gas Construction Company**

**Hydrocarbon Water Gas Apparatus**

**( Patent Applied For )**

**The Most Economical and Improved Machinery  
For Making Water Gas From Crude Oil.**

**Results Guaranteed**

**Construction and extension of Light and  
Power Plants**

**Complete Gas Works**

**Estimates, Drawings and Specifications Furnished for the Altera-  
tion, Improvement or Extension of Existing Works or Con-  
struction of New Works.**

**Correspondence Solicited**

**137 Montgomery St.,**

**San Francisco.**

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

VOL. 8.

February, 1903.

NO. 1

## California Municipalities.

Published Monthly.

H. A. MASON, . . . . . Editor

Office of Publication, . . . . . SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

All persons interested in the study of municipal problems, members of local improvement clubs and other civic organizations, ought to be subscribers to this magazine. It is the only publication of the kind on the Pacific Coast.

Send for sample copy.

### CONTENTS.

#### EDITORIAL:

For the St. Louis Exhibition . . . . .	3
Frame Freeholders' Charters—Matters in the Legislature . . . . .	4
2000 Candle Power Lamps . . . . .	5
Sewage Disposal by Septic Process . . . . .	6
The Cost of Electric Light and Electric Light Plants to Municipality . . . . .	8
Municipal Art in the East (Poem) . . . . .	11
Common Sense in Library . . . . .	12
Civic Affairs in British Municipalities . . . . .	17
Corruption in Management of Public Utilities . . . . .	18
Public Service by Citizens in Private Station . . . . .	19
The Latest from Glasgow . . . . .	21
The Carnegie Benefactions . . . . .	22
Call for Conference—San Jose Sign Ordinance—Street Oiling Specifications at Bakersfield . . . . .	24
Brief Library Notes . . . . .	25
General Stone's Steel Highway . . . . .	26
National Municipal Ownership Convention . . . . .	27
The Community: Its Ideal Government . . . . .	28
What the Cities are Doing—Personal . . . . .	29

**For the St. Louis Exposition** There is to be a grand exposition at St. Louis next year. The state and the counties of California are being appealed to appropriate money in order that the state may be adequately represented on this great occasion. Undoubtedly many of the cities will be asked to appropriate money to assist the good cause.

In this connection: a word to the wise. Look out for the "fakers" and "grafters." This popular cause will be the opportunity for these gentry. Their schemes will take the form of stereopticon exhibitions, living pictures, advertising schemes galore and side shows of various kinds. Now do not be imposed upon. If you have money to burn, burn it at home.

We have doubts as to whether money spent in expositions ever returned ten cents on the dollar invested. But of course as other states make exhibitions California must keep up with the procession. But let the cities be wary as to how they part with their money. Unless the city has some distinctive feature or industry that will pay to advertise, don't spend your money.

However, in case the management of the exposition get up a "model city" as was talked of some time ago, then it might do for some of our municipalities to club together and get up a "municipal exhibit." That might be a good thing—possibly.



**Frame Freeholders' Charters.** There are twelve municipalities in this state that are organized as cities of the fifth class under the general municipal incorporation act. All of the larger cities, and some smaller ones, have now secured freeholders' charters. With possibly two or three exceptions, all of the fifth class cities could also provide themselves with this form of charter and we believe that it would be wise if they would do so within the next two years.

While the charter provided by law for cities of the fifth class is not bad and its plan is generally to be commended, yet the trouble comes by the legislature enacting other general laws that effect it.

With a freeholders' charter the municipality is proof, or nearly so, against the foolish and vicious acts of the legislature. Independence from legislative interference with local affairs is a great desideratum. The way to secure it is by adopting freeholders' charters. The writer has had many years of experience in connection with legislative matters and writes with a conviction born of that experience. Without but slight qualification it may be asserted that the legislature has no regard for the welfare of the municipalities of the state. The legislature is dominated by political elements, and these elements are hostile to municipal progress. They do not believe that merit should control appointments, as a recent action by the State Senate clearly showed. Measures tending to secure additional efficiency in municipal government are not favorably considered. Public service corporations are given extra opportunities to fasten themselves upon the cities and towns. Witness the Broughton Act of two years ago. Were it not for constitutional safeguards there is no doubt but that we would have examples of the "ripper" legislation that disgraced the statute books of Pennsylvania and Ohio. The last legislature tried to "rip" the cities

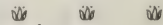
by means of Constitutional Amendment No. 28, but the people gloriously defeated the scheme.

Grave and reverend (?) senators within the past few weeks have publicly lamented the fact that the constitution permits cities to act independently of the legislature.

Furthermore, the legislature is, as a whole, ignorant of municipal affairs. Intelligence is essential now-a-days in framing laws for municipalities. It is unwise to entrust powers of legislation to ignorant bodies.

No one can foresee the damage that may be inflicted upon our municipalities as long as they are subject to general laws.

Therefore, be wise in time. Let every city having a population of 3,500 protect itself by adopting a freeholders' charter within the next two years.



**Matters in the Legislature.** The League is not having the best of luck with its bills before the Legislature, two of which will undoubtedly fail of passage. These are the two bills authorizing the appointment of clerk and marshal in cities of the fifth and sixth classes. These have been unfavorably reported in both Senate and Assembly, and in the face of this adverse action it would be unprofitable to make a further contest.

The bill repealing the law limiting the term of electric lighting contracts to one year has passed both houses and is in the hands of the governor. There is a newspaper report to the effect that he may veto it.

The bill designed to correct the law as laid down in the Redondo case has passed the Senate and has been favorably reported by the Assembly. This bill will also restore to cities of the sixth class the right to impose licenses for revenue, thus changing the law as laid down in the case of Sonora vs. Curtin.

The ballot machine bills have been

favorably considered by the committees of both houses and will undoubtedly become a law.

There are several bills that deal with municipalities. One increasing the terms of officers of cities of the fifth class from two to four years has passed the legislature and is in the hands of the governor. A law changing the date of commencing assessments in cities of the sixth class from May to the first of March has passed the Senate. Also a bill increasing the number of police judges in Oakland from one to two. In various stages of passage are bills providing for a system for registering municipal bonds, amending the street bond act, amending the Broughton act, making all police court fines payable into city treasury, affecting the fees of recorders in state cases, amending the firemen's relief and pension fund act. Most of these are comparatively unimportant.

An attempt is being made to restore the right of counties to impose licenses within municipalities. This is very likely to fail.

There is, so far, very little really vicious legislation in connection with municipal affairs. There is some that is foolish and trifling.

One of the best proposed measures is one by Assemblyman Dunbar giving cities the right to regulate electric lighting rates and requiring public reports from such companies. It is doubtful if it passes.



**"2000 Candle Power Lamps."** In spite of all that has been said and written concerning the false and misleading term "2000 candle power lamps" it still appears that there are yet some who believe that there is such a light giving lamp in use in street lighting.

Very recently a newspaper advised its local Board of Trustees to immediately contract for "2000 candle power" lamps, and then to support its advice gave some mathematical calculations to show that an enormous increase in the quantity of light could be secured for the same price as the city was then paying by substituting such arc lights for the incandescents then in use. It was something along this line: "Fifty 16-candle power incandescent lights yield only 800 candle power, and cost \$75 a month. Ten arc lights would cost the same price and yield 20,000 candles. Result, twenty-five times as much light for the same price."

The error in this lies in the fact that the term "2000-candle power" arc light is a misnomer. The best of authorities never claim to exceed 500 candle power for such a lamp—technically known as a 480 watt lamp. To get such a light the lamp must be absolutely perfect in construction and operated under the most favorable conditions. In ordinary cases the actual candle power will range from 100 to 300 candles. Actual tests have occasionally showed less than 100 candles. In all scientific papers the term "2000-candle power" is no longer used. The correct term is "480-watt lamp."

The actual quantity of light difference between ten incandescents and one 480-watt arc is generally on the side of the incandescents.

In the actual practice of street lighting incandescents are much to be preferred, except at such points as may need a strong light. The reason is that by using incandescents a much better diffusion of light is secured. The use of incandescents is therefore rapidly increasing, while the use of arcs is diminishing.

We hope that municipal officials will not be deceived by the misleading term, "2000-candle power arc light."



---

SEWAGE DISPOSAL BY SEPTIC PROCESS.

---

BY J. W. KEEGAN, SANTA ROSA.

[An address delivered at the Convention of the League of California Municipalities, San Jose, December 12, 1902.]

---

Mr. President. I have been asked to discuss the very important and very difficult question of sewage destruction by bacteria, (or the Septic Process.)

It is only in the last few years that anything definite has been known upon this subject and is not yet generally understood. The great scientist, Pasteur, who taught us our first lessons upon the subject of bacteria; and such scientists as Prof. Folwell of Massachusetts, we have to thank for the presentation of this question, although neither one ever suggested it, as far as I know, as a means of sewage disposal; that part has been undertaken by practical men to some degree all over the world.

I have been requested to confine my remarks particularly to the septic tank at Santa Rosa, and the methods employed by us, which gained the best results. I will say in the first place, however, that Santa Rosa owes much that has been accomplished on the subject of sewage disposal to this League; as it was at one of the early sessions I first heard your worthy Secretary mention the matter. From that start, I borrowed and bought all the books upon the subject of bacterial action that I could find. The result of my study and experimental plant convinced me that it was absolutely safe to construct a plant large enough for the destruction of all the sewage coming from the city, and the result is we have a plant which has destroyed all the sewage sludge of our city for the past year, and produced an effluent which, after leaving the septic tanks, is fit to be used for any purpose, or turned into the creek without the fear of contamination. The condition at our sewer farm before the installation of our present plant for sewage de-

struction was most deplorable. We had tried broad irrigation, which should be called broad contamination; we experimented with the plan of precipitation and found it quite as bad if not worse than broad irrigation.

I can now say for Santa Rosa that we are all greatly pleased with the septic process of sewage destruction and we could not be induced even to consider any other plan of disposal. If you ask yourselves the question, what becomes of the filth of the world? your answer would be, "It is destroyed by nature's plan." That is true; all we have to do is to make it as easy as possible by removing from nature's way all the hindrances and obstructions, then the destruction will be accomplished completely and quickly.

As our friends, the physicians, say, if nature is given a proper chance, it will repair the injury. This is not done when you turn the city sewage into the river, bay, or is turned out onto the surface of the earth. This is the worst form of contamination, and nature is handicapped. You have polluted your streams, bay, or fields, and spread disease amongst many people. This can and should be all avoided by emptying the city's sewage into a properly constructed septic tank.

Our sewer farm is located about two and a half miles below the city and contains seventeen acres of land. There is located our septic tank, which is, I believe, the largest and most successfully operated in the world at this time. The tank is 280 feet long, 18 feet wide and 8 feet deep. The depth is 8 feet from floor to high water mark. It is, however, in duplicate, not side by side, but end to end. The sewage enters at

the east end, the entrance being three feet below high water mark. What we call high water mark is the top of the bacterial scum that forms at the surface. That would be the highest possible point to which the water can rise in the tank. The tank is excavated in the ground, walls and roof are of redwood. I really think that a septic tank would be as good if not better with no walls except the natural earth. Wooden walls are not so bad, but cement walls and floors are absolutely destructive of the purpose. I am thoroughly convinced that to gain the best results the sewage must come in contact with the earth. This I have proven to my full satisfaction and I believe that along those lines there is no one who has made as extensive experiments as I have.

Of course, what bacteria are or where they came from is an unknown quantity. The problem is yet unsolved. But we do know that bacteria are nature's scavengers, that all lifeless organic matter is broken down in structure and returned to the natural elements by some form of bacteria. It is from this we learn how to construct a perfectly natural septic tank. Anaerobic bacteria that operate in the absence of light and air are of the greatest importance in the destruction of sewage. You will find in a septic tank when properly constructed and operated, a scum varying from one inch to eighteen in thickness. This scum is the breeding ground of the bacteria, although they will breed in the absence of the scum, but not as freely. At the bottom there is a somewhat similar condition. In a properly constructed septic tank you will find very few if any bacteria permanently located at or near the center. From this point the effluent must be

drawn off. This is probably the vital point in the construction of a tank. The effluent must not be drawn off too rapidly, while at the same time there must be a current always flowing down throughout the tank so that the albuminous matters may be thoroughly distributed throughout the tank. If the albuminous matter be permitted to pile up in one part of the receiving tank, putrefaction will set in and retard bacterial progress. A very essential matter is to distribute all the sludge equally and continually throughout the tank. This must be provided for when installing a plant. Our tank is provided with sliding gates or current regulators in such a way that we can increase or diminish the current in any part of the receiving tank at any time. While we do not consider that our plant is automatic, it is nearly so, yet the attention necessary must be with a full knowledge of the plant and its devices. The effluent from our plant after being drawn off from the tanks passes to a large settling tank, which is exposed to the light and air; from this settling tank passes to the filter beds, or to irrigation ditches or creek.

I might mention here that our experiments have proven that all typhoid bacilli and other pathogenic bacteria are killed by the septic treatment, no traces whatever being found at any time in the effluent.

In conclusion I will say, from the experience I have had with nature's plan of sewage disposal, I most heartily recommend to all cities, towns and institutions the adoption of this method, and the discontinuation of the filthy practice of contaminating our streams, lakes, bay and fields with the raw sewage from city sewers.



## THE COST OF ELECTRIC LIGHT AND ELECTRIC LIGHT PLANTS TO MUNICIPALITIES.

[MUNICIPAL ENGINEERING.]

There are two sources of unbiased information concerning the operation of municipal and private electric lighting plants, viz.: the reports of the Board of Gas and Electric Light Commissions of the commonwealth of Massachusetts, appearing each year, and the fourteenth report of the United States Commissioner of Labor on water, gas and electric light plants.

Inquiries regarding the comparative cost of electric light under municipal ownership of lighting plants and under contract from private plants led to the selection and comparison of data from these two sources, particularly with reference to cities of about 50,000 population. A paragraph on the cost of installing a municipal plant is also added.

The former series of reports permits comparisons from year to year, but the data must be combined and digested in order to make the comparisons desired. The latter report is anonymous so far as the location of the plants reported on is concerned. The data for the Massachusetts plants are very complete and those in the national report are in most instances very nearly as complete, but probably not quite so reliable as those of the state commission which, under the law, has very close supervision of the companies furnishing gas and electric light and of the municipalities operating their own plants.

Averages of the data in the Labor Commission's report are given in his discussion of the tables. There are four items regarding electric lighting on which comparisons may be made in one or both of the publications referred to; the prices charged in plants under private ownership for lights furnished to private persons; and to municipalities the prices charged in plants under municipal ownership for lights furnished

to private persons, and the cost to the municipalities of lights furnished for public use. These data are given for arc lighting and for incandescent lighting and are reduced to averages with the utmost accuracy possible under the various systems of charging for service in vogue.

The prices charged are definite, usually, and can be reduced to a basis for comparison with comparative ease. The cost to the municipality of public light furnished by its own plant can only be obtained by rather extended computations. In the data from Massachusetts the cost is obtained by adding the operating expenses of the electrical department, the interest on the investment in the electrical plant at the rate paid on town bonds, and depreciation at 5 per cent, and deducting from this sum the income from private consumers for electric current sold to them. In the data from the labor commissioner's report the same process is used, but the interest on the investment is not included; as that is apparently considered to be an advantage accruing to municipal ownership. Data are given, however, for increasing the apparent cost by the amount of this interest, estimated taxes and free service.

The following table gives these data in convenient form for comparisons, the figures from the Labor Commissioner's report being for plants having engines of 1,000 to 2,000 horse-power, approximately the size of plant necessary for a city of 50,000 population under ordinary conditions.

### ARC LIGHTING.

#### —Private Plants—

#### Price to Private Users—

#### . From U. S. Report:

\$159.32 for 3,250 to 3,500 hours a year.  
10.56 cents per kilowatt hour.

## Price to Municipalities—

From Mass. Report:

\$95.24 per lamp per year,  
15.3\* cents per kilowatt hour.

From U. S. Report:

\$94.12 for 3,250 to 3,500 hours a year.  
5.21 cents per kilowatt hour.

## —Municipal Plants—

## Price to Private Users—

From U. S. Report:

\$50.00 for 3,250 to 3,500 hours a year.  
6.98 cents per kilowatt hour.

## Cost to Municipalities—

From Mass. Report:

\$84.34 per lamp per year.  
10.8\*\* cents per kilowatt hour.

From U. S. Report:

\$34.66 for 3,250 to 3,500 hours a year.  
4.18 cents per kilowatt hour.

## INCANDESCENT LIGHTING

## —Private Plants—

## Price to Private Users—

From U. S. Report:

15.38 cents per kilowatt hour.

## Price to Municipalities—

From Mass. Report:

\$21.20 per lamp per year.  
10.0\* cents per kilowatt hour.

From U. S. Report:

\$11.89 per lamp per year.

## —Municipal Plants—

## Price to Private Users—

From U. S. Report:

10.83 cents per kilowatt hour,

## Cost to Municipalities—

From Mass. Report:

\$18.80 per lamp per year.  
10.8\*\* cents per kilowatt hour.

From U. S. Report:

\$2.32 per lamp per year.

It is evident in every instance that the cost of electric light in a municipal plant is less than in a private plant.

\*The average of the price in private plants to municipalities for arc and incandescent lights is 13.6 cents per kilowatt hour, as compared with the average cost of 10.8 cents in municipal plants given above.

\*\*Average of both arc and incandescent cost.

The figures from Massachusetts given in cents per kilowatt hour are from an article by A ton D. Adams in *Municipal Engineering*, vol xxiii, p 160, and are derived from the data in the Massachusetts report by careful computation. They compare the cost of electric light in three towns having combined electric and gas plants under municipal ownership with that in nine towns having similar private plants.

The figures from the same report given in dollars per lamp per year are not so carefully derived. Those for private plants are the averages of the schedule prices for lights paid by municipalities without reference to the candlepower of lamps or the number of hours they are burned in a year. There are twenty-five cities and towns in the average of arc light prices. Those for municipal plants are the averages of costs in fifteen cities and towns for arc lights and thirteen cities and towns for incandescent lights. The cost in each city is derived in the manner sketched above for the candle power of the lamps used, and the averages are taken for each class of lamps, arc and incandescent, without reference to this candle power or to the number of hours they are burned in a year. Some of the data for the reduction to cents per kilowatt hour are given in the report and indicate that the computation, if it could be made, would make the difference between cost in municipal and private plants greater than that shown.

The tables in the Labor Commissioner's report, from which the above figures were taken, show the same excess of cost in private plants over cost in municipal plants for both private and public service in the sixteen classes of plants from those having engines of less than 50 horse power to those having engines of over 5,000 horse power with but two or three exceptions. The tables will also be found in *Municipal Engineering*, Vol. xix, p. 255.

There have been several reports up-



on the differences in cost of electric light under municipal and private ownership which are not so authoritative as those mentioned for they did not take account of all the conditions and were frequently prepared by persons with undue prejudice in favor of or against municipal ownership. Among those which have been abstracted for Municipal Engineering may be mentioned those in vol. viii, pp. 195 and 319; x. 124, 406; xii, 377; xiv, 152; xvi, 321; xviii, 124; 147; xx, 33, 236; xxi, 76, 347, 387; xxii, 106, 322, 331, 370, 415, 418; xxiii, 160, 168, 363, 364. It is not possible to draw any definite conclusions from these reports from the reasons stated above, but their study will be of value in gaining the ability to recognize the factors which must be considered and the weights to be given them. A detailed report by the city electrician of Chicago of the growth of the municipal plant in that city and its effect upon contract rates for municipal lighting, and an editorial discussion of the same will be found in vol. xx. pp 33 and 344, showing what can be done in this direction under rather unfavorable circumstances.

On page 376, vol. xxii, will be found a review of a report in Municipal Affairs, spring number, 1902, which discusses the same plant and its history, demonstrating that the lighting rates have been very moderately decreased in the thirteen years of operation and that more than the average excess of cost of the light furnished by the municipal plant over these reduced contract prices, amounting to less than \$4000 a year, has been expended in reducing the hours of labor and increasing its wages, thus showing that under the same conditions in this regard the plant would have shown a profit over prices of lights purchased by contract. Private rates of the commercial plants show similar reductions to those for lights furnished the city, though the city cannot, under the Illinois constitution, engage in commer-

cial lighting. In these reports all possible allowance for taxes, interest, depreciation, etc., seem to have been made.

In an article on the "Cost of Light from the Electric Arc," by Alton D. Adams, in vol. xvii, p. 65, a comparison is made between the cost of running enclosed and open arc lights, and it is stated that the yearly charge for operating a 330-watt open arc lamp is \$38.13, with the enclosed arc lamp \$10.43 less. This does not include interest, depreciation and repairs as maintenance charges, but simply operation of plant and furnishing of supplies. At the low meter rate of four cents per kilowatt hour, one of these lights would use \$70 worth of current in a 4,000-hour year. On page 195 of the same volume is an article by the same author on incandescent lighting cost, in which a rate of 7 cents per kilowatt hour is assumed as sufficient charge for current to allow for all items of operation, maintenance, depreciation, interest, etc., of the plant, and its cost for a 16 candle-power lamp for a 3,828-hour year is computed at \$13.40. Additions for lamp renewals, lamp fixture charges, etc., make the cost per lamp per year \$17.86. These theoretical figures may be compared with the actual figures in the above table as a mutual check.

The general principles upon which the decision of the question of municipal and private ownership of electric light plants is based are discussed in several articles and editorials in this magazine, such as those found in vol. viii, p. 18: xiii, 357; xiv, 11; xvi, 387; xvii, 343; xix, 32; xxiii, 168. The points in these articles may be summarized as follows: There is little difference in permanency in office in favor of private ownership. The effects of political manipulation must be considered independently of the question of municipal ownership. There are opportunities for corruption in either case, and those opportunities in the case of private ownership stand in the way of the proposed plan of private ownership

with municipal control of issues of stock and bonds, interest, rates, etc. The contention in the article in vol. xvi, p. 321, that the movement toward municipal ownership finds its source in the idea that "private ownership of property is immoral" has no basis of fact. Municipal ownership, at least in this country, if proposed only for such services as give rise to practical monopolies which should never be given into the control of individuals. Figures showing the relative cost under the two plans are only of local application and every item must be considered in all its relations to the local conditions. The entire question must be considered as a local one and the advantages and disadvantages of either plan for the particular locality must be carefully balanced, the experience in other cities being used only to throw light upon the problem and not as an example to be followed blindly. Nepotism, favoritism, and politics enter into the management and operation of both municipal and private plants, on the whole with less deleterious effect in the latter. Civil service will aid the municipal works. Publicity of accounts would remove some objections to private ownership, enabling the retention of its advantages. Unless taken honestly from unbiased sources, figures of relative cost under the two systems must be accepted with caution.

Regarding the cost of municipal electric light plants there are some data in the Labor Commissioner's report. There are four municipal plants having engines with 1,000 to 15,000 horse power, listed in the tables. The cost of these four plants is as follows:

For 1,030 horse power, total cost, \$163,000; annual expenses, \$44,752.

For 1,050 horse power, total cost, \$150,000; annual expenses, \$30,851.

For 13,000 horse power, total cost, \$225,000; annual expenses, \$33,728.

For 1,180 horse power, total cost, \$109,048; annual expenses, \$14,812.

The details of items are given in this magazine, vol. xxii, p. 158.

The equipment of municipal electric light plants in Massachusetts is discussed by A. D. Adams in vol. xxii, p. 434.

The volume of proceedings of the American Society of Municipal Improvements for 1896 has a large table giving many data regarding details of equipment and operation of electric lighting systems which will be of interest in considering the adoption of details. The volume for 1899 contains a number of reports of the cost of furnishing arc lights in many cities. Private plants in twenty-nine cities furnished 1,200 candle-power lights for street lighting at an average price of 2.73 cents per lamp hour or \$90 per lamp per 3,300 hour year, and seventy-eight cities furnished 2,000 candle-power lamps at an average price of 2.81 cents per lamp hour, or \$92.73 per lamp per 3,300 hour year. In municipal plants in twenty-five cities the average cost of 2,000 candle-power lamps, with 5 per cent allowance for interest and 4 per cent for depreciation, is 2.17 cents per lamp hour, or \$74.91 per lamp per 3,300 hour year.



### Municipal Art in the East.

'Twas the home of a poor man, and all through  
the house  
There was not enough fuel to warm up a mouse!  
And the wife and six children in bed were  
close rolled,  
With the thin quilts drawn tight just to fend off  
the cold.  
There's a noise at the door and the husband  
comes in,  
With delight in his eyes and his lips in a grin—  
"Cheer up, my own love, and let cold weather  
come—  
I have swiped seven billboards, and that will  
help some!  
Here is one praising 'Force,' and with strength  
that should blaze—  
Here's a Child's cigar board—what a smoke  
that will raise!  
Here's a real estate sign—well, that burns dirt  
cheap.  
Here's a Cascade board—that shall work while  
we sleep!  
I have other boards, too, but, my love, that's  
enough  
To show how I've brought in the real fuel-  
stuff!"  
And the glad flames leaped high, while each  
deeply pleased heart  
Rejoiced in the cause of Municipal Art!  
—Exchange.



## COMMON SENSE IN LIBRARY.

BY W. R. EASTMAN, IN MUNICIPAL JOURNAL AND ENGINEER.

A building is not the first requisite of a public library. A good collection of books, with a capable librarian, will be of great service in a hired room, or in one corner of a store. First the librarian, then the books and after that the building.

But when the building is occupied the value of the library is doubled. The library is no longer dependent on the favor of some other institution, and is not cramped by the effort to include two or three departments in a single room. It will not only give far better service to the community, but will command their respect, interest and support to a greater degree than before.

### GENERAL SUGGESTIONS.

The following hints are intended as a reply to many library boards who are asking for building plans.

The vital point in successful building is to group all the parts of a modern library in their true relations.

In a popular library, outside the reference room, for each foot of wall space available eighty books can be placed on eight shelves. Floor cases having two sides will hold 160 books for each running foot, and in a close stack twenty-five books, approximately can be shelved for each square foot of floor space. But the latter rule will be materially modified by ledges, varying width of passages, stairs, etc.

The above figures give full capacity. In practical work to provide for convenient classification, expansion, oversized books and working facilities, the shelves of a library should be sufficient for twice the actual number of books, and the lines of future enlargement should be fully determined.

By careful study the building committee is prepared to draw an outline sketch indicating in a general way their needs and views. They are not

likely to secure what they want by copying or even by competition. The best architects have not the time nor the disposition to compete with each other. A better way is to choose an architect, one who has succeeded in library work, if possible, who will faithfully study the special problems, consult freely with the library board, propose plans and change them freely till they are right. And if such plans are also submitted for revision to some librarian of experience, or to the library commission of the state, whose business and pleasure it is to give disinterested advice, so much the better.

### LIBRARY FOR A COUNTY NEIGHBORHOOD

The following outlines taken from actual library buildings are offered by way of suggestion:

An inexpensive building for a small country neighborhood may have one square room with book shelves on the side and rear walls. A convenient entrance is from a square porch on one side of the front corner, and a librarian's alcove is at the opposite corner, leaving the entire front like a store window, which may be filled with plants or picture bulletins. With a stone foundation the wooden frame may be finished with stained shingles.

A somewhat larger building may have a wider front, with entrance at the center.

Book shelves under high windows may cover the side and rear walls, and table may stand in the open space.

It will be convenient to bring together the books most in demand for circulation on one side of the room, and those needed most for study on the opposite side. One corner may contain juvenile books. In this way confusion between readers, borrowers, and children will be avoided. Each class of patrons will go by a direct line to its own

quarter. This is the beginning of the plan of departments which will be of great importance in the larger building.

The number of books for circulation will increase rapidly, and it may soon be necessary to provide double faced floor cases. These will be placed with passages running from the center of the room toward the end, and that end will become the book or delivery room, and the opposite side will be the study or reference room.

The next step is to add space to the rear, giving a third department to the still open room. If the book-room is at the back the student readers may be at tables in the right-hand space, and the children in the space on the left. The librarian at a desk in the center is equally near to all departments, and may exercise full supervision.

The presence of a considerable number of other busy persons has a sobering and quieting effect on all, and the impression of such a library having all its departments in one is dignified and wholesome. It may be well to separate the departments by light, open hand rails, screens, cords or low book cases. It is a mistake to divide a small building into three or four small rooms.

#### THE LARGER LIBRARY.

For a larger library these rails must be made into partitions, giving to each department a separate room. Partitions of glass, set in wooden frames, and possibly only eight feet high, may answer an excellent purpose, adding to the impression of extent, admitting light to the interior of the building, and allowing some supervision from the center. With partitions on each side, the entrance becomes a central hallway, with a department at each side, and the bookroom at the end. This is the best position for the bookroom for two special reasons. Overlapping the departments in both wings it is equally accessible from either, and at the back of the house, a plainer and cheaper wall can

be built, admitting of easy removal when the growth of the library requires enlargement.

Sometimes the angles between the bookroom and the main building may be filled to advantage by workroom and office. These working rooms, though not large and not conspicuous, are of vital consequence, and should be carefully planned.

We have now reached a type of building which, for lack of a better word, I may call the "butterfly plan," having two spread wings and a body extending to the back. Others call it the "trefoil." This general type is being substantially followed in most new libraries of modern size. From one entrance hall direct access is given to three distinct departments, or perhaps five, by placing two rooms in each wing.

#### SOME EXTERIOR CONSIDERATIONS.

If we have an open park to build in we shall be tempted to expand the hallway to a great central court or rotunda. Perhaps the importance of the library may justify it, but we should be on our guard against separating departments by spaces so great as to make supervision difficult, or passing from one to another inconvenient. We should aim to concentrate rather than scatter.

More frequently the lot will be too narrow. We must draw in the wings and make the narrower rooms longer from front to back. With a corner lot we can enter on the side street, leaving a grand reading room on the main front, and turning at right angles as we enter the house, between other rooms to the bookroom at the extreme end of the lot. Or again, we shall be obliged to dispense entirely with one wing of our plan, and have but two department rooms instead of three on the floor. Every location must be studied by itself.

Basement rooms are of great service for workrooms and storage. A basement directly under the main bookroom



is especially valuable to receive the overflow of books not in great demand.

A second and even a third story will be useful for special collections, class and lecture rooms, or for a large audience hall. In the library of moderate size it will often be found convenient to build a bookroom about six feet high to cover two stories of bookcases, and wholly independent of the level of the second floor of the main building.

#### WHEN TO PLAN FOR EXTENSIONS.

To meet the needs of a rapidly growing library it is important at the beginning to fix the lines of extension.

A building with a front of two rooms, and a passage between, may add a third room at the rear, and at a later stage add a second building as large as the first and parallel to it, the two being connected by the room first added. This is the architect's plan of the Omaha Public Library.

When a library is so large that one bookroom is not enough, two such rooms may be built to the rear, one from each end of the building, with open space between, and these two wings may be carried back equally and joined at the back by another building, thus completing the square around an open court.

This gives wide interior space of light and air, or grass and flowers. Such is the plan of the Boston Public and Princeton University libraries. It will be the same in Minneapolis when that library is complete. In the plan of the new library at Newark, New Jersey, the central court is roofed over with glass, becoming a stairway court, with surrounding galleries opening on all rooms. In Columbia University, New York, as in the British Museum, the center is a great reading room, capped by a dome high above the surrounding roofs, and lighted by great clerestory windows.

If the street front is very long there may be three extensions to the rear, one

opposite the center and one from each end, leaving two open courts, as in the plan for the New York Public or the Utica Public; and this general scheme may be repeated and carried still farther back, leaving four open courts, as in the Library of Congress. This plan can be extended as far as space can be provided.

When the general plan of the large building is fixed, passages will be introduced, parallel to the front and sides, and departments will be located as may be judged most convenient, always having regard to the convenience of the patrons of each department in finding ready access to the books they need, and providing for supervision and attendance at least cost of time, effort and money. Extravagance in library building is not so often found in lavish ornament as in that unfortunate arrangement of departments which requires three attendants to do the work of one or two.

#### THE QUESTION OF LIGHT.

Natural light should be secured if possible for every room. Windows should be frequent and extend well up toward the ceiling, terminating in a straight line, so as to afford large supply of light from the top. Windows like those in an ordinary home or office building, coming within two or three feet of the floor are more satisfactory, both for inside and outside appearance, than those which leave a high blank wall beneath them. From the street a blank wall has a prisonlike effect; on the inside it cuts off communication with the rest of the world, and the impression is unpleasant. The proper object of library windows six or eight feet above the floor is to allow unbroken wall space for book shelves beneath them. There is no serious objection to this at the back of the room, or sometimes at the sides of the house, where the windows are not conspicuous from the street, but every room of any size, if it

is next to the outer wall, should have windows to look out of on at least one one side.

The lighting of large interior rooms is often a difficult problem. Light will not penetrate to advantage more than thirty feet. Skylights, domes and clerestory windows are used. In the case of the dome or clerestory the room to be lighted must be higher than those immediately surrounding it. The clerestory plan, with upright windows, is most satisfactory when available, being cheaper and giving better security against the weather than the skylight. In a large building with interior courts, the lower story of the court is sometimes covered with a skylight and used as a room.

The problem of light is peculiarly difficult in the crowded blocks of cities. A library front may sometimes touch the walls of adjoining buildings, so that light can enter only from the front and rear. If extending more than forty feet back from the street, it will be necessary to narrow the rest of the building so as to leave open spaces on each side, or to introduce a little light by the device of light wells. Occasionally a large city library is found on the upper floors of an office building, where light and air are better than below, and the cost of accommodation is less. The use of elevators makes this feasible.

#### GENERAL SCHEME OF SHELVING.

The general scheme of book shelves should be fixed before the plan of the building is drawn. Otherwise the space for books can not be determined and serious mistakes may be made. Between the two extremes of open wall shelves and the close stack a compromise is necessary. The large library will put the bulk of its books in a stack, and bring a considerable selection of the best books into an open room. The small library will begin with books along the walls and provide cases for additions from time to time, as needed. Its patrons will enjoy at first the generous spaces of the

open room, without any array of empty cases to offend the eye and cumber the floor. When walls are covered with books a floor case will be introduced, and others, when needed, will be placed according to plan, till at last the floor is as full as it was meant to be, and the basement beneath having served for a time to hold the overflow, a second story of cases is put on top of the first. This process should be planned in advance for a term of twenty years.

For public access passages between cases should be fine feet wide. Cases have sometimes been set on radical lines, so as to bring all parts under supervision from the center. This arrangement, especially if bounded by a semi-circular wall, is expensive, wasteful of space and of doubtful value, except in peculiar conditions. It is not adapted to further extension of the building.

For ordinary books in a popular library the shelf should not be more than eight inches wide, with an upright space of ten inches. Eight shelves of this height, with a base of four inches and crown finish of five inches, will fill eight feet from the floor, and the upper shelf may be reached at a height of eighty-one inches, or six feet nine inches. Ordinary shelves should not exceed three feet in length. A length of two and a half feet is preferred by many. A shelf more than three feet long is apt to bend under the weight of books. For books of larger size a limited number of shelves with twelve inches upright space, and a few still larger, should be provided. The proportion of oversize books will vary greatly according to the kind of library, a college or scientific collection having many more than the circulating library. Any reference room will contain a large number of such books, and its shelves should correspond.

#### SHELF CONSTRUCTION AND ADJUSTMENT.

Much attention has been given to de-



vices for adjustment of shelves. Some of these are quite ingenious and a few are satisfactory. No device should be introduced that will seriously break the smooth surface at the side. Notches, cross-bars, iron horns or hooks or ornamental brackets expose the last book to damage. If pins are used they should be so held to their places that they cannot fall out. Heads of pins or bars should be sunk in the wood, and the place for books left, as near as possible, absolutely smooth on all sides. It is at least a question whether the importance of making shelves absolutely adjustable has not been greatly overrated. As a fact the shelves of the circulating library are very seldom adjusted. They may have all the usual appliances gained at large expense, but there is no occasion to adjust them outside the reference room. They remain as they were put up. It is probably well to have the second and third shelves movable, so that one can be dropped to the bottom and two spaces left where there were three at first. But all other shelves may as well be fixed at intervals of ten inches without the least real inconvenience, and the cases be stronger for it and far cheaper. A perfectly adjustable shelf is interesting as a study in mechanics, but it is practically disappointing. Its very perfection is a snare, because it is so impossible to set it true without a spirit level and a machinist. All shelves in a reference room should be adjustable. Bound magazines might have special cases.

Iron shelf construction has the advantage of lightness and strength, filling the least space and admitting light and air. Where three or more stories of cases are stacked one upon another iron is a necessity. It also offers the best facilities for adjustment of shelves and is most durable.

#### AS TO FLOORS AND WINDERS.

A floor of hardward is good enough for most libraries. Wood covered with corticene or linoleum tends to insure the

needed quiet. Floors of tile, marble or concrete are very noisy, and should have strips of carpet laid in the passages.

On the walls of reading-rooms it is neither necessary nor desirable to have an ornamental wainscot, nor indeed any wainscot at all, not even a baseboard. Bookcases will cover the lower walls, and the books are the best ornaments.

Small tables for four are preferred in a reading room to long, common tables. They give the reader an agreeable feeling of privacy.

Do not make tables too high. Thirty inches are enough.

Light bent wood chairs are easy to handle.

Steam or hot water gives the best heat, and incandescent electric lamps give the best light.

Windows should be made to slide up and down, not to swing on hinges or pivots.

Without dwelling further on details, let us be sure

1. That we have room within the walls for all the books we now have or are likely to have in twenty years; provide the first outfit of shelves for twice the number of books expected at the end of one year, and add bookcases as we need them, leaving always a liberal margin of empty space on every shelf. We must plan for the location of additional cases for twenty years, with due consideration of the question of public access.

2. That all needed departments are provided in harmonious relation with each other, and so located as to serve the public to the best advantage and at least cost of time, strength and money.

3. That the best use of the location is made, and the buildings suited to the constituency and local conditions.

4. That the estimated cost is well within the limit named, for new objects of expense are certain to appear during the process of building, and debt must not be thought of.

5. That the building is convenient

for work and supervision, a point at which many an elegant and costly building has failed.

Make it also neat and beautiful, for it is to be the abiding place of all that is best in human thought and experience, and is to be a home in which all inquiring souls are to be welcomed. Since the people are to be our guests, let us make the place of their reception worthy of its purpose.



### **Civic Affairs in British Municipalities**

[MUNICIPAL JOURNAL AND ENGINEER]

#### **MUNICIPAL ICE.**

The corporation of Wolverhampton, began, some little time ago, to sell to the public, the ice that was left over after the stall-holders in the Market had been supplied, and the Town Clerk is the authority for the statement that the corporation manager had declared his intention to capture the Wolverhampton trade. It is also stated that there is a friendly understanding between the city and the Linde Company, to which the contract for machinery was offered, to the effect that the latter would not compete with the undertaking of the city.

#### **MUNICIPAL DAY NURSERIES RECOMMENDED.**

At a recent meeting of the Kensington (London) Borough Council, the Medical Officer submitted a special report on the high rate of infant mortality in the borough, suggesting several remedies for the evil. He said that the discomfort, untidiness and unhealthfulness of many of the homes of the poor were largely due to sheer ignorance, and that he believed that there would be no diminution in infant mortality until instructions in the principles of sanitary law and hygiene form part of the system of state education. He further urged that the need of municipal creches, which might be managed by ladies of leisure, and, in connection with which there should be a municipal milk

depot where the mothers could procure pure milk for the little ones.

#### **MUNICIPAL CREMATORIES.**

Several English municipalities propose to erect crematories in their cemeteries, or some other convenient location, to provide a public means for the disposition of the dead by cremation when desired. The park and cemeteries committee of the City Council of Bradford has instructed the City Architect to prepare plans for a crematorium, to be erected in the cemetery, the cost of the building not to exceed \$24,350.

At a recent meeting of the St. Pancras Borough Council it was recommended that \$200 be appropriated to defray the expense of the Borough Surveyor, the Clerk, and two Councillors, in visiting provincial crematories, with a view of obtaining information which might be useful in the construction of the crematorium which the Council is to erect at Finchley.

#### **MUNICIPAL PUBLIC HOUSES.**

At a recent meeting of the Temperance Legislation Board, the presiding officer, Viscount Peel, favored the establishment of municipal public houses. Such an undertaking for an American city would be most shocking to the delicate sensibilities of the temperance workers, but to English or Continental cities it would not draw forth a single shudder. The Viscount said: "I believe that the solution of the drink problem lies in municipal rather than in private control, and I would like to see the experiment tried! I would be glad to see a great city the size of Birmingham, Liverpool or Manchester, working all the public houses in its area for the benefit of the town, the Watch Committee, however, having no concern with their management. This suggestion might seem rather surprising after the terrible onslaught in the Times against municipal trading (municipal ownership in America), but big cities contain men who are fit to become Ministers of State, and surely such men are able to manage their own affairs.



## Corruption in Management of Public Utilities.

[MUNICIPAL ENGINEERING.]

The developments in the bribery cases at St. Louis have shown with the greatest clearness that not all the mismanagement, speculation and corruption in municipalities occur under municipal management of public utilities. Indeed, if comparison be made in the city of St. Louis itself, the conclusions must be definitely favorable to municipal ownership and operation.

It is often urged as an insurmountable obstacle to municipal ownership and operation that the requirements of the politicians will lower the grade of service to the detriment of the operation and increase in its cost, and that the opportunities for raiding the treasury, either directly or indirectly, are so great that dishonesty in municipal officials will be the rule.

It is assumed by those who present these arguments that it is not necessary for private corporations to pay attention to the demands of practical politics, and that the lack of direct connection of elected officials with the treasury of the institution is preventive of corruption.

Unfortunately neither of these assumptions is correct. It is seldom that a public service corporation is not in need of some additional favor from the municipal officials, and it is very easy for a city council or for a city official to make much trouble for a corporation if its privileges cannot be directly curtailed. The corporation can quiet the "strikers" or obtain the favors desired, as shown in St. Louis, by finding places for political henchmen, or by the judicious distribution of more direct financial contributions to private or to party treasuries. These transactions can be more thoroughly concealed than similar raids upon public treasuries, and public opinion is not so strongly against them. In fact, therefore, the objectionable features of municipal ownership in this

class are simply changed in form and made easier to conceal, and their influence upon the municipal conscience is reduced, while that upon the taxpayers' pockets is increased.

The raids upon the public treasury may be made with equal ease, but they are in the form of high rates for municipal service, or, if a reputation for economy must be cultivated, they take the form of higher rates for private service. Instead of a direct tax for the fattening of the corporation and payment to it from the public treasury, which would be inconceivably corrupt, each user of the service has his taxes increased in the form of excess of its cost over an equitable charge, and bears it almost without a murmur. That much of this extra tax may get into the pockets of the city council and others influencing its legislation is demonstrated by the St. Louis developments, perhaps more clearly than ever before. Thus the corruption argument against municipal ownership is completely riddled.

Another fact which has been demonstrated is that a single venal council may saddle upon a municipality a contract which cannot be broken for a long term of years, and the city must pay the penalty long after an awakening of public indignation has "turned the rascals out." A distinct advantage in municipal ownership is found in the fact that when the rascals are turned out they are all turned out, for they are all municipal officials, and the better administration can begin at once, so that the consequences of the malfeasance of a single set of officials are limited very closely to their term of office and the time necessary to perfect a reorganization.

Unless the proposition made by Mr. McMath in this magazine last month is adopted, it is difficult to see what advantage in the line under discussion there can be in private over municipal ownership of public utilities. It will be remembered that he recommends that

the odium of a stolen franchise attach to the franchise itself as much as to the officials of city and company who unite in the robbery; that the title to the franchise, whether in the hands of innocent purchasers or not, be subject to the same proof of validity, when questioned, as the title to a piece of real estate.

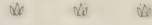
Some recent decisions by the lower courts in Indiana indicate a method of escaping some of the consequences of a grant of an unlimited franchise, but unless fraud or misrepresentation on either side is made sufficient to vitiate any agreement or contract between city and company, grants limited in time may be held valid as not being complete alienation of municipal rights.

What is termed municipal control will hardly be better than the present condition as a preventive of corruption unless the publicity of accounts which is an essential part of that proposition can be forced to serve as a check to shady private transactions.

The water-works of St. Louis are owned and operated by a municipal department without scandal, either of inefficient service of political employes or of raids upon the treasury. If either should develop, the matter is in the hands of the voters, and if the public opinion is in favor of honest administration, it can be obtained at the next election, and without waiting until the expiration of a franchise, with faint hope of bettering conditions even then.

The contract system under departments never turned over to private corporations for operation under franchise shows corruption in some cases and not in others. An argument in favor of construction of public works under municipal officials might be drawn from this were it not that the officials actually controlling the work are the same in either case, and dishonesty and mismanagement would be quite as evident under one system as under the other. Neither can the irregularities in these

departments be used as pointing arguments in favor of granting franchises to private corporations.



### Public Service by Citizens in Private Station.

[EXTRACTS FROM AN ADDRESS BY HORACE E. DEMING.]

There are several hundreds of thousands of public offices in the United States, national, state and local. That is encouraging to the boy. He may get a chance. But, young gentlemen, there is a hundred million of population and there are not offices enough to go around; and then, too, of these hundreds of thousands of public offices there are only a few thousands of any particular importance as determining questions of public policy or influencing governmental action. Only one man here and there may be president, but few may become governors and there are still fewer United States senators than governors; and, if we take a larger group of public officials, there are not so many of us after all who can expect to be members of legislatures or even of boards of aldermen. Moreover there are some things connected with the methods for securing nominations to public elective office and of retaining public place that are repugnant to many; and in spite of those methods, or possibly because of them, a political career in this country, if it means continuing in public elective office, is uncertain and insecure. It is plain that most of us, young gentlemen, if we wish to render public service to our country must find some way of doing it while remaining in private station.

Now how shall we do this? How shall we do it most intelligently? Most effectively?

We must remember that the struggle of the people to control the government, to be the government, is the struggle toward democracy. When the public



policy of the government is the deliberately formed will of the people, and when that public policy is enforced through the chosen representatives of the people, a representative democracy will have been achieved. If you want to serve your country you must be in full sympathy with that democratic ideal. You must study your country's history from that point of view. The struggle of the people to control the government, is the political history of our country. You must be on the people's side in the struggle for liberty. You must have confidence and an abiding trust in the fundamental honesty and in the high aspirations of the people. You must want the people to win. You must be willing to help the people win. And with a knowledge and a confidence born of your study of the political history of your country and of the progress of democracy you must be sure that the people will win.

For a quarter of a century, almost without exception, every important step forward politically, whether in policy or in administration, has been taken upon the initiative of the private citizen and under the pressure of a public opinion which he has created.

This is the democratic way. Any other way would do us no good. If we have not the vitality, if we have not the energy, if we have not the patriotism to investigate these subjects, to initiate these movements, to create the public opinion and to keep up the pressure, then we are not fit to be citizens of our common country.

The choice of a field for public service by the citizen in private station is boundless. But why go far to seek it? Why not take the home field? Why not be a public spirited citizen in your own town? Why not do some public service in the town and to the town

where you live, even if you are not mayor or director of public safety or commissioner of public works or a member of the board of aldermen? Here is a field for public service right at your very doors that will give abundant room for all your energy.

Young gentlemen, do not think that because you do not hold office you cannot be of the greatest public service to your city. Here, too, the struggle is to free the people from political bondage. Honest, progressive and efficient municipal government in this country rests upon the fundamental democratic principle of local self-government. Clothe the municipality with all necessary power to determine and enforce its local public policy, give it adequate machinery for that purpose, then leave it untrammelled by outside interference and unaided by outside assistance. Leave it alone; let it work out its own problem. This is true democracy. A superimposed government is not a democratic government. The struggle of the people of the town toward democracy—to control the local affairs of their own town—is the mainspring of the campaign for municipal betterment in this country.

It is the public-spirited private citizen who diagnoses the evil, discovers the remedy and arouses the public opinion which compels its application. This is the democratic way. In a democratic state it is not the government which creates public opinion but public opinion which creates the government, and it is the public-spirited citizen in private station who forms and educates the public opinion that controls the government. Never forget, young gentlemen, that you are citizens of a state struggling to realize the democratic ideal.

## The Latest from Glasgow.

[THE PUBLIC.]

Sensational editorials in the press of this country, over the exposures of "municipal socialism" in England made through the London Times by that prince of statistical adventurers, Robert Porter, no longer appear; but echoes from those that did appear a month or two ago may still be heard. A word, therefore, directly from Glasgow, where this "municipal socialism" originated and prevails with greatest intensity, will not come amiss even at this late day. We are quoting from John Paul, editor of a Glasgow paper of imperial circulation and influence. Referring to Porter's work, Mr. Paul writes:

The "plutocratic" criticism shows little knowledge of Glasgow's municipal doings; the mere twaddle of an ignorant penny-a-liner. The municipal improvements have come along in the nature of things; just as the city has grown and a better public spirit has been manifested. The citizens are quite conscious and quite satisfied that they get full value from the principal municipal services—water, gas, parks and galleries, tramways, especially the latter. The electric light is presently competing with the gas supply or supposed to be, but there are both very serviceable; the electric light of course is used more for business than for domestic purposes, while it is also used now for public lighting. The municipal telephones are on their trial, but seem to be giving satisfaction. The public market is an institution that has long existed in Glasgow. It suits the business transaction there, and in the old days was a center of trade in the town necessitating some municipal superintendence. The baths and wash houses have grown up out of a desire to meet the wants of the people who inhabit houses of one and two rooms; and sad to say 60 per cent of the people of Glasgow live in such houses. The "Improvement Trust," which the "pluto-

cratic" press calls municipal tenement houses, really came about through necessary municipal improvements, i. e., knocking down unsanitary property and adding to the amenity of the district attacked in the common interest. The other things that Glasgow does according to the "plutocratic" press, look big in type, but there is really not much in them and the people of Glasgow do not bother about them—except that a few cranks ventilate their opposition by occasional "letters to the editor" or "the urgency of backing down," or "going steady." Compared with other towns Glasgow is a low taxed city; but nothing of the profits from any of the successful municipal services are taken to reduce the taxes, nor were any of these services initiated with that view. Far less with that of making the city tax free. Tax freedom has certainly been discussed time and again, at the council, in the press, and on the platform; but it has been so discussed as a thing to be done not through municipal services, but by the taxation of land values. Glasgow is engaged just now for example in a new sewage scheme, which must be got through. This will undoubtedly add to the taxes, as the scheme will probably cost anything in the neighborhood of two millions before it is finished.

### Municipal Heating Plant.

After establishing the municipal electric lighting plant and proving that electricity can be supplied to the citizens at ten cents per thousand watts, Webster City, Iowa, has decided to maintain a municipal heating plant. Last spring a private corporation asked for a franchise to put in a gas and heating plant. The council refused the franchise, but decided to put in a plant under city control. A special election was held and the proposition carried unanimously. The mains are run through the business streets and may be tapped by business houses, and when the business warrants it, the residence portions of the city will be supplied likewise.—*Mun. Journal & Eng.*



## The Carnegie Benefactions.

WRITTEN FOR MUNICIPALITIES.

Several years have passed since Mr. Carnegie began, systematically, to give away money. As the larger part of his donations have been bestowed within the last two years, it is yet too early for the public—his chief beneficiary—to form a correct estimate of their value, particularly as many of the new enterprises that have been aided must slowly grow from small beginnings. We may, however, gathered from what has already been said and done, some ideas respecting the scope of Mr. Carnegie's plan, his singleness of aim, and his inflexible resolution in executing his designs.

No complete statement has ever been made public of the number and amount of his gifts—and doubtless will not be—but from various sources at command the following very incomplete table has been compiled as a matter of general interest.

In 1899, 33 library gifts.....	\$1,753,000
do endowment, Peter	
Cooper Union, N. Y.....	500,000
In 1900, 27 library gifts .....	815,000
do Scotland.....	51,000
In 1901, 149 library gifts.....	6,313,000
do Detroit.....	750,000
do San Francisco.....	750,000
do St. Louis.....	1,000,000
do N. Y. City (branches)	5,200,000
do Scotland.....	800,000
do endowments, Brad-	
dock, Duquesne, Homestead,	1,000,000
In 1901, endowments, Univer-	
sity, Birmingham, Eng.....	250,000
In 1902, 160 gifts in U. S. and	
Canada.....	4,214,000
In 1902, 40 gifts Great Britain	1,500,000
At various times,	
Carnegie Institute and Tech.	
School, Pittsburg .....	9,500,000
Pension fund for workmen .....	4,000,000
Carnegie Institution, Washing-	
ton, D. C. (University).....	10,000,000
Scottish Universities.....	10,000,000
	<u>\$58,396,000</u>

It is believed by those competent to

judge that the total sum of library and other gifts by Mr. Carnegie is already larger in excess of \$75,000,000.

We have not time to minutely inquire into the various processes which led to the vast fortune acquired,—the evolution of a bobbin boy at \$1.20 per week to a financial magnate. We are, however, aware that to this man of dauntless energy repeatedly came great opportunities. While yet an operator on the great Penn. R. R. he had a chance to invest in the then new sleeping car line; an investment with others of \$40,000 in oil lands gave for one year alone cash dividends of a million dollars; as founder of the Keystone Bridge Works, just at the period when iron was displacing wood for bridges, he scored an immense success, while the instant adoption of the Bessemer steel process led to the building and ownership of a number of huge works, culminating, after many prosperous years, in the sale to the U. S. Steel Co. of his own interest for \$250,000,000.

Truly,

"There is a tide in the affairs of men

Which, taken at the flood, leads on to fortune."

Yet all these favoring chance would have been in vain had not Andrew Carnegie possessed keenness of vision, dispatch, self-reliance, strong judgment and unlimited capacity for work.

Retiring from the business of accumulating wealth, he has entered upon the occupation of expending most of his vast estate. He claims that to expend this wisely requires as important qualifications as in its production. Certain it is that all the thought and care that ripened experience of three score years can bestow is now centered on this one aim. He had formed a plan, definite in its outlook, and far-reaching as the round world. Considering himself as a trustee of wealth for the English speaking race, he proposes to aid in humanizing and uplifting its members through the sacred cause of education. For higher education through university life two great

donations testify his strong interest. But his chief concern is to help the masses of the people through the modern institutions of the free public library. Stronger language may not be found than these words in which he says, "It is from personal experience that I feel that there is no human arrangement, so powerful for good, there is no benefit that can be bestowed so great, as that which places within the reach of all the treasures of the world which are stored up in books"

Having these intense convictions no object, however worthy, is allowed to interfere in the prosecution of his work, which he aptly calls "the library manufacturing business." In a recent address he referred to the thousand and one letters of advice from well meaning persons whose advice of wealth-giving do not coincide with his own, and also to those whose myriad tales of distress and call for help are poured in through his daily mail of 500 or more letters.

He begs to be allowed to concentrate his time on his chosen field of operations, adding that, "if it is ever filled I shall of course have to look out for other employment." Much pains would be spared the writers of these letters did they but realize that probably not one letter in a hundred reaches Mr. Carnegie's eyes; the others, read by his secretaries, find an open grave in the waste basket.

It is interesting to recall that while the average application takes its place on the file, when a city loses its library by fire Mr. Carnegie's offer of help is made instantly. Seattle, Lincoln, Neb., Marlborough, Mass., and St. Cloud, Minn. have all had abundant evidence that "a friend in need is a friend indeed."

Sometimes it is urged that such wise and munificent giving appears like paternalism, particularly in those communities which are abundantly able to provide homes for their own libraries. This charge does not seem to be sustained when the distinct features of the plan are disclosed. Self help is the key note of the proposition. No city, with

rare exceptions, receives a dollar of Mr. Carnegie's money unless it will agree in legal form to provide a suitable site, and yearly appropriate at least ten per cent of the amount of his donation. Is not this more of the attitude of a partner in a good work than that of a lavish giver?

Busy scenes might now be witnessed if we could peep into the new Carnegie home in New York. Its owner has lately told us that "he has now more than 800 applications on file for library buildings which are under examination by his secretaries through correspondence (often by an agent's personal visit) the great majority of which will, no doubt, be given. Some will not be, for none are passed without careful investigation and unless we are satisfied that there is a community tributary to the library which is willing and anxious to support it, thus making them in the fullest sense the libraries of the people because maintained by the people."

We cannot help asking the question, "What will result from this great outpouring of money for the public good?"

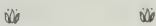
Incidentally, we remark a wonderful advance will be made in architectural standards of taste and usefulness for public buildings in general and, particularly, for library structures. The erection of many hundreds, or thousands, of library homes through the length and breadth of the land will prove to be such a stimulant as never before was known. While powerfully affected by local conditions—as indeed all architecture must be—it is evident that a distinctive type of architecture will be presented for the future library, appealing through external grace to the love of the beautiful, and by its quiet, serene atmosphere suggesting that it is the abode of the works of the great souls of earth. Equally certain it is that the interior will be carefully modeled for the convenience of administration and the supreme advantage of the owners—the public.

What else may be expected? Inevit-



ably, an immense increase of the reading habit must follow. Not all of this will be of the best kind. Trash, under the name of fiction, will still be published, "puffed," and to some extent, find its way to the library shelves. But fortunately, this class will be outnumbered by the strong, healthful fiction, with real views of life, which is a delight and uplift to millions of readers. Closely, in line and, indeed, a part of this benefit is the improvement in the grade of the total circulation of all classes of works. This large gain is sure to result from the fact that nearly all of the new libraries are arranged for open access to the shelves, which allows patrons to browse and select at their will.

Last, but of paramount importance, will not the clear, exalted aim of this generous donor eventually be realized? If we concede that education is the one priceless boon of earth, will not the up-building of these free public libraries hasten the day when every ambitious person may gather for themselves the elements of real wealth and nobility of character?



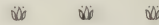
### Call for Conference.

Acting under instructions of the League of California Municipalities and in compliance with the request of numerous municipal accountants, a conference of all City Auditors and City Clerks, acting as accountants, is hereby called to meet at the rooms of the Clerk of the Board of Supervisors of San Francisco, New City Hall, on Thursday February 19th, at 10 a. m. and Friday, February 20, 1903, for the purpose of designing schedules upon which to make municipal reports, and to consider methods looking to the securing of uniformity in public accounting.

You are hereby requested to attend. Please bring with you copies of your last annual report and any blank form

used in your office that you think would be serviceable on this occasion.

H. A. MASON,  
Secretary.

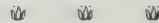


### San Jose Sign Ordinance.

The city of San Jose has recently amended its sign ordinance, so that it now reads as follows:

"No business of other sign, or its support of supports, shall be suspended, hung, erected, maintained, or in any manner placed or maintained above, in, on or across the sidewalk, or any part thereof, except in the following manner: All such signs, and their supports must be at a distance of not less than twelve (12) feet above the sidewalk, and said signs shall be so constructed and fixed to the building to which they are attached that they may be swung back flush against such buildings, and all such signs must, during the daytime be swung back flush against such building; provided always that signs, both ends of which are attached to any building, may at any time, project not more than eight (8) inches over the inner line of the sidewalk, as may be placed at any height above the sidewalk; and provided also that signs painted on cloth awnings are excepted from the provisions hereof.

"No awning, or any part thereof, on any curtain, or other thing, attached to said awning, shall be placed or suffered to remain at a less height above the sidewalk than seven (7) feet."



### Street Oiling Specifications at Bakersfield.

The city of Bakersfield has adopted the following specifications covering the construction of oiled streets:

First—The street, after being graded in accordance with specifications for grading streets in city of Bakersfield will be ready to receive the oil.

Second—The quantity of crude mineral oil to be applied shall be at the rate of one and one-half gallons of oil per square yard of surface area or street.

Third—The oil shall be 12 to 14 Baume gravity and containing not over 2 per cent of water and heated to a temperature of not less than 200 degrees Fahrenheit when being applied.

Fourth—The oil shall be applied as follows: The street shall be plowed to a depth of six inches, then be coated with oil at the rate of one gallon of oil per square yard of area; then the oil shall be plowed under to a depth of four inches and then harrowed with a disc harrow, or rolled with a Fitzgerald spike roller; then a second coating of oil shall be applied at the rate of one-half gallon of oil per square yard of surface area of street. The street shall then be harrowed or rolled with the Fitzgerald spike roller till the oil becomes thoroughly incorporated with the surface material of the street. Then the street shall be rolled till sufficiently compacted to withstand ordinary traffic without rutting.

Fifth—When accepted the street shall be on the established grade, having a true and even surface and crown.

Sixth—The contractor shall furnish all material and appliances necessary for the prosecution of the work to completion in a thorough and workmanship manner.

Seventh—Bids shall state price per barrel (42 gallons) of oil applied on street according to the method prescribed in these specifications.

Eighth—The work shall be performed under the superintendence and to the satisfaction of the street superintendent and city engineer.

Ninth—The Board of Trustees reserve the right to reject any and all bids.

The specifications were adopted as prepared by City Engineer Evans.

### Brief Library Notes.

Carnegie has given Petaluma \$12,500 and Visalia \$10,000 for new library buildings.

Vallejo has accepted the proposition made last month by Andrew Carnegie to give the city \$20,000 for a library building.

Merced is to have a new building—not by Carnegie. A wealthy citizen of that place named George W. Fancher recently died and left a fund of \$25,000 to be used in erecting a monument to himself. The executors consider that a library building would be about the right sort of a monument, and hence have offered that sum to the city for that purpose, without the usual Carnegie conditions.

Carnegie libraries at San Jose, Riverside, Alameda and Los Gatos are nearly ready for occupancy. Buildings at San Bernardino, Fresno, Eureka, Santa Rosa and Santa Ana are under construction.

The total circulation for home use of the Pasadena Public Library for January was 9,087. This beats all previous records by nearly 600.

Oakland's circulation for January was 15,056.

Santa Monica's circulation for the year 1902 was 21,260.

Long Beach reports a circulation for the past year of 20,662. The library is in a flourishing condition, and hopes to announce itself as a recipient of Mr. Carnegie's bounty within a short time.

Fresno's public library is undergoing a thorough reorganization at the hands of Miss Bertha Kumli, librarian of the Santa Rosa Library. Miss Kumli is a graduate of the Armour Institute of Chicago and has rendered valuable services in the reorganization of several libraries in this state.



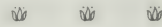
## General Stone's Steel Highway.

[MUNICIPAL JOURNAL AND ENGINEER.]

During the last month a sample stretch of new pavement was laid in one of the heavily traveled streets of New York. This is the steel rail highway with which General Roy Stone has been experimenting for some time. These steel rails will be laid in pairs so that their inner edges will be less than the minimum wagon track distance apart. They will be of three-eighth-inch steel, one foot in width, and along the edges will be a ridge about half an inch high, so as to keep the wagon wheels along the rail itself, although not high enough to prevent its easily turning out. These rails will have perpendicular sides three and one-half inches deep, and will be riveted together by fish plates. They will be laid in forty-foot lengths, weighing 1,000 pounds each and will be imbedded in gravel laid on crushed stone to a depth of eighteen inches. The fish plates binding the sides have slot holes so that in the expansion of the rails the bolts can slide in the slots. A distance of five-sixteenths of an inch is allowed between ends to permit of expansion and three-quarter inch tie rods will bind the rails together. These will be placed every thirteen feet. The United States Steel Corporation donated the rails, which are to be laid under supervision of Borough President Cantor and the Automobile Club of America. General Stone places the cost of this style of highway at about \$4,000 a mile.

*Later.*—The new steel road, recently laid in Murray street, Manhattan, under the direction of Gen. Roy Stone, is a dismal failure so far as its application to this particular street is concerned. This is one of the busiest streets in the downtown district. For the greater part of the day the track is impeded by the trucks backed up the curb on either side to permit a loading and unloading of goods, so that the steel track laid

through the center of the street is seldom free enough to permit a truckman, even if he so desired, to use the track. Moreover, during the few times that the street is clear, only about one truckman in ten attempts to use it. As might be expected, those who do use it find the traction easier. When the official test of the traction was made a few days ago it was found that it took thirty-seven and one-half per cent less of power to draw a given load when using the rails. But even if this kind of roadway were laid in a more suitable street, like Park Place, it would not be available for anything except single truck traffic, for, with a double team, one horse is sure to track along the steel railway and thus not have an equal footing with his mate. This feature has proved very objectionable when double teams have used the steel track in Murray street, as they do once in a while. It is to be hoped that the engineering department of New York will see to it that no more of this track is laid, for it really forms an obstruction to the street; and it would be the height of folly to attempt to use it or adapt it to the country road. It appears to be another scheme to create a larger market for steel.



Awarding contracts to the lowest bidder is not what it is cracked up to be. It reduces the price of pavements, for other construction work, and for supplies to the lowest possible figures, but it also reduces the quality to the lowest possible notch which will pass inspection. The wage earner must have a living wage and likewise the contractor must have a living profit. If a municipality cuts the price below the fair and reasonable point the contractor is sure to make his loss good in some other way, regardless of the specifications. As we have remarked before, this is not only a poor but a vicious policy. The city engineer and other purchasing heads of departments, are paid because of their

peculiar qualification and fitness to administer their affairs, and for that reason the responsibility should be placed on their shoulders and they held to strict account for results obtained, the same as would be done in any large business concern were they at the head of similar departments. This is a matter which should have the close attention not only of mayors, but aldermen, within whose power it lies to correct the bad practice.—Municipal Journal and Engineer.



### National Municipal Ownership Convention.

A National Convention on Municipal Ownership and Public Franchises has been called by the New York Reform Club to meet in the rooms of the Club, 233 Fifth avenue, New York, on February 25, 26, and 27.

A preliminary notice of the program arranged for includes the following addresses: "Recent British Experience of Municipal Ownership," by Mr. Robert Donald, Editor of the *Municipal Journal*, London; "Recent German Experience of Municipal Ownership," by Mr. Edward T. Heyn, of Berlin; "Comparison of European and American Methods and Results," by the Hon. Robert P. Porter, Director of the Eleventh Census of the United States.

The question of "Transportation" will be discussed by Mr. Charles T. Yerkes, of London and New York; Hon. Carter H. Harrison, Mayor of Chicago; Mr. Edward M. Shepard, Counsel to the Rapid Transit Commission of New York and M. Louis D. Brandeis of Boston.

"Gas and Electric Lighting" will be discussed by Lieutenant J. B. Cahoon, Secretary of the National Electric Light Association; Mr. Walton Clark, General Superintendent of the Gas Improvement Company, Philadelphia, Pa.; Mr. Alton D. Adams, Engineer, Boston, Mass., and Prof. Edward W. Bemis,

Water Commissioner, Cleveland, O.

The subject of "Public Water Supplies and Public Telephones" is covered by the following topics: "European Experience of Public Ownership of Telephone," by Mr. Bennett, Engineer for Glasgow and other British Municipal Telephone Systems; "Arguments for Public Ownership of Telephones," by Prof. Frank W. Parsons, of the Boston Law School; "The Superiority of Corporation Ownership of Telephones," by Mr. U. N. Bethell, General Superintendent of the New York Telephone Company; "City Ownership of Water Supply," by Mr. William R. Hill, Chief Engineer of the Aqueduct Commission of New York.

Other topics are announced as follows: "How Should Public Service Corporations be Controlled?" by Mr. R. R. Bowker, formerly of the Edison Electric Illuminating Company of New York; "Regulation and Taxation of Public Service Corporation," by Mr. Allen Ripley Foote, Editor of *Public Policy*, Chicago,—the discussion on the latter topic to be opened by Prof. John R. Commons, Secretary of Taxation Committee of the National Civic Federation; "Labor Clauses in Franchise Grants and the Labor View of Municipal Ownership," by Ex-Mayor Chase of Haverhill, Mass.; "Taxation of Franchise Values," by Mr. Frederick Howe of Cleveland, O. The discussion on the latter question will be opened by Mr. Wheeler H. Peckham, President of the City Club, New York.

The Reform Club will be the headquarters for the Convention and the privileges of the Club will be extended to all delegates. An informal dinner will be given by the Club to the guests from out of town, on Friday evening, 27th.

It is expected that railway companies will grant the usual rate of a fare and one-third for the round trip, if one hundred or more attend the convention from out of town, but in order for delegates to avail themselves of this privilege it will



be necessary for them to secure a special certificate, provided for this convention, from the local station agents from whom they purchase their tickets.

A stenographic report of the proceedings will be taken for publication in Municipal Affairs, which is the quarterly published by the Reform Club Committee on City Affairs.



### **The Community: Its Ideal Government.**

[EXTRACTS FROM AN ADDRESS BY MAYOR WORSWICK, BEFORE THE UNITY CLUB, SAN JOSE.]

Mayor Worswick, speaking to the toast of "The Community: Its Ideal Government," said:

"While men are human, a perfect community and a perfect government must necessarily be idealistic. Even the small community of two, said to have been in the Garden of Eden six thousand years ago, and patterned after the image and conceptions of the creator Himself, yielded almost to the first temptation and bowed its head in disgrace.

"And so on down the centuries, communities have come and gone only to leave the trail of the serpent behind. Nevertheless it is always profitable and elevating to meditate on what might be if human nature were less conspicuous for its frailties.

"It seems to me that the two terms, "An Ideal Community," and "An Ideal Government," are almost synonymous in meaning. For how would it be possible to realize one without realizing the other? In other words, if the standard of citizenship and public virtue were raised sufficiently to insure universal integrity, how could the government of such a community be other than pure and perfect?

An ideal community to my mind is an independent one. A family of citizens, each thinking for himself, each interested in the other's welfare, and all

pulling harmoniously together for the public good. In such a community no arrogant dictator could hold sway. No man or set of men would dare to assert their right to direct the affairs of government or move officials in authority to this place or that place as the automaton moves the pawns upon a chess board.

"It is only with a strong, sterling sentiment, permeating community life, and an individual independence that knows only the right, that ideal community life can be attained.

"Ideal government means independent government. It would eschew the self seeking 'loaves and fishes' methods that have fastened upon so many American towns and cities. It would demand particularly in city and county affairs, that men forget the partisanship that so frequently dams the channels of independent thought and action, and that invariably leads to strife and corruption and all other ills that have lowered the public life of this and other countries to the level of self-degradation.

"An ideal government would teach men the value of the franchise, spend the money of the people honestly, appoint men of integrity to office, do away with private ownership of public utilities. In fine, an ideal government would be a millenium in public life that we are now so far from reaching that I sometimes wonder if human nature will ever attain to it.

"I am not, however, pessimistic. I believe that the world is growing better and I believe, too, that government in California is reaching at least a more ideal condition than has marked its course in the past.

"Such organization as this will, I have no doubt, sow the seed for a reaping later of a harvest that will right many of the wrongs under which we now groan, and which, if removed, would place public life upon the basis which we so earnestly seek.

## What the Cities are Doing

Mayfield is talking of incorporating.

Santa Clara's duplicate gas generating system is completed.

San Jose and Napa vote on charter amendments February 18th.

The street employees of Sacramento are talking of forming a union.

Healdsburg is investigating the subject of municipal telephones.

Fresno voters refused to endorse a proposed bond issue for a septic tank.

The new city halls at Pasadena and Santa Monica are nearly ready for occupancy.

Anburn is considering the installation of a sewage disposal plant, possibly a septic tank.

The Santa Rosa Women's Improvement Club is endeavoring to procure a park for the city.

The new freeholders' charter of Salinas and Watsonville have been approved by the legislature.

Mayor Hanford of San Bernardino suggests that the city proceed to get a freeholders' charter.

Redding has purchased a rock quarry, will buy a rock crusher and hereafter will macadamize all streets.

Pomona will hold a bond election upon the questions of \$100,000 for school houses and \$30,000 for parks.

Kern has awarded a contract for a town hall and fire department house; also has purchased a 60-gallon chemical engine.

Santa Cruz's proposed freeholders' charter was refused adoption at the election held for the purpose of voting thereon.

Palo Alto has authorized the purchase of a ten-inch water meter and will measure of all water furnished by its water works.

Pomona has employed Electrician F. A. Worthley of Riverside to make plans and specifications for a municipal lighting system.

Suisun will, on March 25th, vote on the question of issuing bonds to the amount of \$25,000 for a new main pipe line from the water reservoir to town.

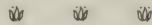
Lemoore reports that its newly elected constructed water and light works are more than paying expenses; that the income is increasing while the rates are below the average usually charged.

Corona is considering two electric lighting propositions. One is to install a complete municipal plant and the other is to put in a distributing system and purchase power from a long distance transmission company.

Sacramento is investigating a new proposition, known as the North Fork, as a source for a supply of clear water; also proposes to purchase a new fire engine; also is considering bids for a new 10,000,000-gal pump for the water works.

Ventura's bond election resulted in favor of the issuance of bonds to the amount of \$29,000 for the following purposes: \$8,000 for sewer extension, \$8,000 for town hall, \$8,000 for Ash street sewer, \$3,000 for plaza walks and \$2,000 for cross walks.

Berkeley is troubled over the election or appointment question. A petition of citizens wish to have a charter amendment submitted, making the street superintendent, attorney and engineer elective instead of appointive as at present. The trustees do not altogether favor this idea but would like to have the marshal and clerk appointed instead of being elected.



### Personal.

H. J. McIsaac has been appointed City Attorney of San Rafael, in place of Thos. P. Boyd elected District Attorney.

John McCourtrey has been appointed trustee of Winters in place of H. V. Walsh.

Chas. Thomas, City Clerk of Berkeley, has resigned and a rearrangement of city officials has been had as follows: Street Superintendent C. D. Maloney was appointed City Clerk, City Trustees E. Q. Turner was appointed Street Superintendent and Francis Ferrier was appointed City Trustee.

S. Townsend has been appointed City Trustee of Long Beach, in place of C. S. Walker, resigned.

Geo. S. Wheatley has been appointed City Clerk of Stockton in place of I. S. Robinson, who has become Deputy County Treasurer.

## Removed

PATRICK & CO.,

RUBBER STAMPS & ETC.,

TO

221 Sansome St. Ground Floor,

Between Pine and California Sts.



# An Economical Street Lamp



The city of Vallejo, Cal., is paying \$8 50 per lamp per month for eighty electric arc street lamps or a total of \$8,000 per year. With the MERIDEN HYDRO-CARBON ARC LIGHT the city of Vallejo could be lighted for \$1,039 for material and allowing for attendance \$1,500, an amount far exceeding what it should cost, would make the cost of lighting \$2,539 per annum, which shows an annual saving of \$5,500, or a sufficient amount to build each year a new school house or go far towards paying the cost of educating the children of that city.



The city of Benicia is paying for fifteen electric arc lamps the sum of \$12 each per month or \$2,160 per year. With the MERIDEN HYDRO-CARBON ARC LIGHT it would cost for material \$200, for attendance \$300, as it will take a man but two hours per day to attend to a plant of this size, making a total cost per year of \$500, a saving of \$1,600 per year and a far better light.



The city of Sonoma pays for twenty-five 32-candle power lamps which give them but 600 candle power per night the sum of \$600 per year. With the MERIDEN HYDRO-CARBON ARC LIGHT they could have ten lamps giving 16,000 candle power per night at a cost of \$130 per year including attendance not over in all \$100 per annum, a saving of \$400 per year and over 15,000 candle power per night.



The company would be glad to give to those interested the names of eastern cities now exclusively using this light, also the names of parties who have factories and stores lighted with this system.

## Meriden Hydro-Carbon Arc Light Co.

OF CALIFORNIA

819 MARKET STREET

Room 29

SAN FRANCISCO, CAL.

# CALIFORNIA MUNICIPALITIES

VOL. 8.

JULY, 1913.

No. 6.



NEW CITY HALL, SANTA MONICA.

SAN FRANCISCO OFFICE . . . . .  
ROOM 14, EIGHTH FLOOR MILLS BUILDING.

ONE DOLLAR A YEAR.

SINGLE COPIES, 10 CENTS.



Builders, Attention

# RUBEROID

[Trade Mark Registered]

A Fabric Prepared for

Roofing Buildings and  
Covering Exposed Pipes

EASILY APPLIED

ACID PROOF

COLD AND HEAT PROOF

WATER PROOF

Send to us for Samples and Prices.

Bonestell, Richardson & Co.

401 Sansome Street, San Francisco.

FOR 

Dynamos

Motors

Transformers

Switchboards

 Both 

Alternating and Direct  
Current

Call on or write the

Wagner-Bullock Electric Co.

OF CALIFORNIA

629-631 Mission St., San Francisco, Cal.

## JOSSELYN'S

 Ready Roofing Paper

A preparation of cloth and paper made to withstand the most extreme heat or the effects of water or gases. A non-conductor and can be used about electrical works or construction of any kind.

524 Golden Gate Avenue,

San Francisco, Cal.

E. SHIRAN, Agent.

# California Municipalities.

A JOURNAL FOR PROGRESSIVE CITIES.

8. July, 1903. No. 6

## California Municipalities.

Published Monthly.

H. A. MASON - - - - - Editor

Place of Publication, - - - - - SANTA CLARA, CAL.  
San Francisco Office, Room 14, Eighth Floor, Mills Building.

All persons interested in the study of municipal problems, members of local improvement clubs and other civic organizations, ought to be subscribers to this magazine. It is the only publication of the kind on the Pacific Coast.  
Send for sample copy.

### CONTENTS.

#### EDITORIAL.

Notes .....	161
Education in Landscape Gardening.....	163
City Ownership of Electric Lighting.....	164
Proper Distribution of Street Light.....	170
Streets and Pavements.....	173
Improved Streets and Their Repairs.....	178
Manila's Water Supply—Public Play Grounds for Washington.....	181
Mayor Stevens Says Something.....	182
Little Parks .....	183
Public Compensation for Street Car Mo- nopolies .....	184
Traveling Library System Inaugurated.....	185
What the Cities Are Doing.....	187
Personal—Brief Library Notes.....	188
Index Volume 7.....	189
Index Volume 8.....	190

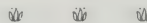
This is the last issue of CALIFORNIA MUNICIPALITIES. Hereafter it will be issued under the name of PACIFIC MUNICIPALITIES. It is going to broaden its sphere.



Why would it not be a good plan to broaden the work of the League of California Municipalities and make it a Pacific Coast League, taking in the municipalities of the entire coast?



A lot of street oiling is being done this summer, although it is to be noticed that a few places that did such work last year are not doing it this. In these cases the officials did not pursue correct methods, or came to the conclusion that the benefits were not commensurate with the cost.

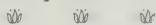


The State Board of Health is interesting itself in the pollution of streams by sewage, and Sacramento and Stockton have been notified to find means of purifying their sewage. It promises to be a hard proposition with these towns, and probably a resort must be had to the septic process.



Many towns have just completed the work of having the municipal accounts experted. It is to be noticed that in several instances serious losses have been discovered, though nothing of a criminal nature. And the losses in each case may be traced to inadequate bookkeeping methods. Not infrequently the trouble is keeping the account with the marshal. Yet this account is just as easy to keep as can be. The trouble is that it is not balanced frequently, and sometimes it runs along for years without an attempt to balance it and experting is very difficult. Clerks would do well to observe the following rules:

1. Keep the tax collection account separate from the license account.
2. When the tax roll is returned see to it that the delinquent tax returned balances the account to a cent—if it doesn't, find out why not and see that it does and then close it.
3. Close the license account every three months by crediting licenses returned and see that it balances to a cent. Do this and the books will be easy to expert. Most towns will find that they can make money by having a proper accounting system, and very few towns have it at present.



The bureau system of administering the government of a city appears to be a failure in San Francisco. The Board of Public Works has become a discredited body, but whether justly so or not matters little so long as the fact exists that it does not have the public confidence. The trouble is that it is not a representative body and is not responsible to the people. In practice cities are finding out that vesting authority in bodies of that kind is not the thing. Authority ought to be centered in one body and that ought to be made responsible to the people who ought to have the power of removal in some manner,

perhaps similar to the method provided for in the Los Angeles charter. By-the-way the Los Angeles "official recall" hasn't been made use of yet, and hence seems to be working all right.



Mayor Stevens, in his recent annual message, uttered a truism when he said that an official were he free to do so, could go into the open market and for cash buy supplies for his city for less money than they can be had for under the present system of advertising for sealed bids. He is right, RIGHT, RIGHT. And besides he can get a better class of goods. Every city of any pretensions ought to have an official buyer, or better still, all the cities ought to club together and have one official buyer for all. It would be well for the League to study this proposition and see if some plan might not be worked out that would secure this result.



Don't be a fossil town. This means for city officials to keep doing something. Quit the business of meeting, reading reports of affairs and adjourning. Start sidewalk improvement, street work, plant shade trees,—anything to keep from getting stagnant.



The women of San Bernardino have instituted a crusade against the practice of merchants in obstructing the sidewalks by boxes, agricultural implements, etc. It is a very worthy movement and one calculated to result in some permanent good.

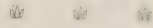


Two more towns, Crescent City and Biggs have become members of the League of California Municipalities. The century mark is now very close at hand.

### Education in Landscape Gardening.

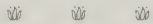
It has been a matter of interest and study to watch the growth and progress of our professions as the country has developed, and without referring to those which have become established factors in our condition and prosperity, a glance at that of Landscape Gardening will be timely. It has been noted in these columns from time to time the establishment of courses of instruction in the art at Harvard and elsewhere, and it is certain that the spreading interest in the subject among educated people will bring about such a demand for competent landscape gardeners that both men and women of taste will be moved to adopt the profession as a life-work. Already many educational institutions are taking steps to follow the example of Harvard, and so intimately related to higher life and living is the cultivation and improvement of our natural outdoor surroundings that a course of study in the direction of stimulating and imparting knowledge to this end will become a prominent feature of University education. The agricultural colleges are recognizing the importance of landscape gardening and the culture and use of the natural material required in the work of outdoor improvement, and are now moving in some of the states to make this department more prominent. The schools have always been prone to take immediate advantage of a promising movement toward universal betterment, and this in spite of the protesting spirit so frequently manifested by the practicing professional. No doubt such a movement and the improved means of acquiring knowledge increase the number of aspiring amateur practitioners and writers, but it is narrow policy to discourage such effort, for it means, and has always led up to, an increasing demand for the services of the professional proper, by impressing upon the public at large the utility and in due course

the necessity for their service, which a constantly increasing breadth of view establishes.—Park and Cemetery.



An article is published in the Agricultural Year Book, on use of mineral oil in road improvement. It was written by James W. Abbott, special agent of the office of public road inquiries. He says the beneficial effects of oil on roads have been conclusively proven in California and that 750 miles of roads and streets are now oiled in that State, from San Diego on the south to Butte county on the north. Wherever oil with an asphalt base is cheap, he advocates its use on the roads. Thus far California is the only state that actually practices the use of oil on roads, though Texas has tried it to a limited extent, and experiments have been made in the East and in three foreign countries.

The most effective object lesson in the use of oil is at Chino, where the soft, sandy roads have been transferred to hard, resilient semi-asphalt pavements by the persistent use of oil, and teams haul two and a half tons where formerly one ton was a heavy load. Special Agent Abbott predicts the constantly widening use of oil as the result of California's experience.



Director of Works Taylor has projected a fire protection system involving the expenditure of \$300,000 for the St. Louis exposition. The system includes miles of high-pressure standpipes in all the exposition buildings. If a great fire should break out in one of the main buildings the whole force of the standpipes could be turned on, exerting a pressure of 250 pounds to the square inch. A reservoir will be constructed on the west division of the site having a capacity of 4,000,000 gallons.



There is no excuse for having dirty, untidy streets. Clean up just as often as possible. It will pay.



## CITY OWNERSHIP OF ELECTRIC LIGHTING.

BY VICTOR ROSEWATER, PUBLISHED IN MUNICIPAL AFFAIRS.

Gas was first introduced in London in 1807, but not generally used for street lighting until after 1817. The electric lamp, as we all know, first found practical demonstration in the exhibit made at the Paris Exposition of 1878. Its introduction and adoption in this country for both private and public illumination is a matter of the last twenty years.

The application of electricity to lighting and its perfection for practical uses came at a peculiar period of our history, so far as concerns the question of municipal ownership. Municipal ownership of various public services had been tried by American cities with varying results. The experience with municipal plants for the distribution of water had been eminently successful, while the few experiments with municipal gas works were still the subject of lively contention. It was a period in which our municipalities were busily engaged in numerous costly public improvements urgently demanded to meet the needs of rapidly growing populations. The defective condition of legislation and the meager powers reposed in our municipal corporations constituted serious obstacles to public ownership and the cities were, therefore, for the most part, helpless, as well as unprepared to take on the new functions such as would have been required by the installation of an electric lighting plant. As a result, for nearly twenty years the discussion of municipal ownership of electric lighting has continued pro and con, and while I believe much headway has been made in the direction of arousing popular sentiment to the advantages of municipal ownership, it must be admitted that public opinion is as yet by no means firmly crystallized.

## SOME SETTLED POINTS.

I believe we can all agree that sever-

al important points have been definitely settled beyond serious dispute.

1. Electric lighting is a monopolistic industry. In the early discussion of municipal ownership the principal argument on the side of the lighting corporations was that all the evils and abuses complained of would right themselves under the beneficent operation of the law of competition. If the people of any city were dissatisfied with the character of the service rendered, or the price charged, all they had to do was to charter another electric lighting company and transfer their patronage to the one that offered the better terms. The history of electric lighting both here and abroad completely discredits this assumption. Nowhere has competition been effective. Everywhere has combination been manifested. Even when competing companies were originally chartered and enfranchised, they have all been merged into one organization, or have divided territory, completely excluding competition. It is needless to go into further details on this point. Both sides will agree that competition in electric lighting is unnecessary and undesirable, that a duplicate electric lighting is unnecessary and undesirable, that a duplicate electric lighting service for the same territory constitutes an economic waste making necessary higher charges than would be required for a singled unified plant. A potential competition exists between electricity, gas, gasoline and other lighting agencies, but competition as a regulative force between rival electric lighting concerns is out of the question.

2. Electric lighting is a public or a semi-public undertaking. The very nature of the business invests it with a public character. A corporation cannot be launched to go into the business of supplying electricity for light and power

on the same plan that a corporation would be formed to embark into the manufacture of farm machinery. The plea that the public has no interest in the conditions under which electric lighting concerns operate has been abandoned. Their exclusive use of a portion of the streets, the menace of their wires to life and property, the interference of their poles and equipment with fire fighting, all constitute points of contact with public needs outside of the matter of quality of service and price regulation. The assent of the municipality is required before an electric lighting plant may be installed and the right of the public through its municipal government to exercise control even where its powers are delegated to a private corporation is fully conceded.

3. Electric lighting is subject to the law of increasing returns. In former discussions much was made of this proposition, namely, that with every additional investment of capital and labor an established plant bear more than a corresponding return from sales of product. The point sought to be scored was that the very fact of increasing returns placed a concern once entrenched, in position to monopolize the field and to bar out all competitors. But the same importance no longer attaches to this thesis because more careful analysis of the industrial organism has demonstrated it to be from one point of view a mere truism and from another simply a measure of franchise value. It has been found that the law of increasing returns does not apply exclusively to monopolies, but is to be discerned, though perhaps within narrower limits, in industries essentially competitive, where it is traceable more particularly to effective industrial organization. That the municipal monopolies of service are susceptible of close and systematic organization goes without saying. Looked at from another standpoint, the law of increasing returns so far as it is assuaged in this and al-

lied fields measures the variations of franchise value. If the area supplied is occupied by a steadily growing population, or by people whose demand for the service is increasing, the increment of profit that flows from expanding business accumulates at a rate in excess of that of increased expenses. Per contra, should the population for any reason fall away, or the demand for the product shrink, or be satisfied with substitutes, the value of the franchise would suffer a more than proportionate diminution.

#### STATISTICAL LIMITATIONS.

When we come to the comparative cost statistics we meet with many difficulties. These difficulties I have already discussed in another place (*American Statistical Association Quarterly*, March, 1893), and I will concede that the best figures that have so far been at our disposal are not to be implicitly relied upon for purposes of close comparison. To undertake to figure out with precision how much, if any, advantage accrues in dollars and cents from municipal ownership as against contracts with private corporations is quite impossible from the data at our command. In the first place, the comparison of contract prices by themselves is often deceptive because the amount of lighting service varies from place to place. In one city the lamps may burn but a few hours nightly on a moonlight schedule, whereas in another they are burned all of every night. Again, the length of the contract period is important because in response to an advertisement for lighting bids under contracts for one, two, three, five or ten years respectively, it will be found that the proposals for the different terms will differ very materially. The location of the wires underground or overhead—the location of the lamps in clusters or singly on poles—their distribution over a wide or circumscribed area—all enter into the cost of service and tend to vitiate comparisons of cost between different cities. In the



matter of municipal lighting plants, we have as yet no uniformity of bookkeeping by which we may be sure similar entries are made up of the same items. In many cases, moreover, we have a system of joint production in which an electric lighting plant is conducted in conjunction with other monopolies of service (with waterworks, for example), which almost defies statistical separation of cost elements.

The geographical situation also has much to do with determining the cost of the motive power—whether or not water-power may be used, or if steam, the quantity and the quality of the fuel. Still another variant lies in the percentage of depreciation which must always be more or less arbitrary. What I will admit, with reference to the use of cost statistics, is that the so-called average cost is deceptive, that it is useless to seek to represent complicated processes by a single numerical figure, that cost statistics, while in themselves most valuable, must be employed as a basis of comparison only with the utmost care with the fullest knowledge of special conditions and with due allowance for the many limitations which affect their accuracy. It must not be assumed, however, that I argue for the discrediting of cost statistics altogether; for they embody the financial experience of the various undertakings, both private and municipal, and our course for the future must be guided largely by the experiments and experiences of the past.

It is not my purpose to spread out an imposing array of figures contrasting public and private lighting plants. The officials of the census bureau have been collecting data relating to electric lighting throughout the country, but their schedules have not yet been tabulated, and are, therefore, still inaccessible. When published they will doubtless supply all the materials necessary for a careful study of the conditions as they exist to-day.

#### DEPARTMENT OF LABOR INQUIRY.

The most comprehensive inquiry into electric lighting plants that has been made with any official authority is that of which the results are contained in the fourteenth annual report of the Commissioner of Labor, being for the year 1899. In this report Commissioner Carroll D. Wright and his assistants succeeded in gathering data for 952 plants in the United States, of which 320 were municipally owned and controlled, while 632 were operated under private or corporate ownership.

Realizing the difficulties of handling the statistics and the utter impossibility of finding a single unit to which the product could be reduced, Commissioner Wright divided the plants into groups according to the total horse-power capacity of their engines and classified all his material by corresponding groups. The total investment to the end of the last previous fiscal year in the 320 municipal plants operated was \$10,908,929, and that in the 632 private plants was \$113,917,815. His final conclusions expressed in the summaries bringing together by groups all the facts which could properly be compared are as follows:

"1. Average price per kilowatt hour charged in arc service: Taking up the average price charged per kilowatt hour by private plants in each group, and comparing it with the average price charged to private users per kilowatt hour by municipal plants, it is seen that in all the groups subject to comparison except one, the average price charged by municipal plants is smaller than that charged by private plants.

"2. Average price per sixteen-candle power lamp per year charged in un-metered incandescent service: Taking up the average price charged to private users, it is seen that in all the groups except two, the average price charged by the private plants is considerably in excess of that charged by the municipal

plants; while, so far as the electricity used for municipal purposes is concerned, it is seen that, with the exception of three groups, the average cost per lamp per year to the municipality of its own service is very much smaller than the price charged by private plants to the municipality for a similar service, this cost in some cases being less than half the price charged by private plants.

"3. Average price of incandescent service per kilowatt hour to private users: Taking up the figures it is seen that in all of the groups the average price charged per kilowatt hour by municipal plants is less than that charged by private plants.

"4. Average price of incandescent service per lamp hour to private users: An examination of the table shows that this average price is less in every group containing municipal plants than the corresponding groups of private plants.

"5. Average price of incandescent service per ampere hour to private users: The table shows that the average price is less in the municipal plants than in the private, in all of the groups in which comparisons could be made, except one.

"6. Average price per lamp per year of arc lighting, by hours of service rendered: Taking up the price to private users, it is seen that in all of the groups except one, the average price charged per lamp per year is smaller in municipal plants than in the private ones. Comparing the columns showing the average price charged by private plants per lamp per year to the municipality, of lights furnished by municipal plants, it is seen that in all of the groups except one, the cost per lamp per year of lights furnished by municipal plants is smaller than the price charged per lamp per year by private plants to the municipality for the lights used in municipal service."

#### MORE RECENT STATISTICS.

The work begun in this inquiry by

the Department of Labor has been supplemented since by annual reports upon the statistics of American cities, confined, however, to cities having a population of over 30,000, and including statistics of electric lighting only as incidental to general statistics of municipal, financial and other activities.

With these unvarnished and uncolored facts and figures before us, we can take up more intelligently the various arguments and assertions on which the advocates of private ownership of electric lighting rest their case.

#### ELEMENTS OF COST.

Rightly or wrongly, the first question asked when the subject of municipal ownership is broached is, "Will it pay?" If municipal ownership meant a heavier burden on the taxpayers of the city no other argument could command attention. But should the beneficiaries of private franchises still insist that it is more economical for the city to sublet the task of supplying its electric lighting to a franchised corporation, the answer is that the results of every investigation into comparative cost under private and public regimes contradicts their assertion. In all candor I ask, Why should a private corporation be able to supply electric light more cheaply than a poor corporation? Would it be rational to believe, entirely apart from the facts and figures we have already examined, that the elements entering into the production of electricity for lighting purposes come more expensive to a municipal corporation than to a private corporation?

The cost of production may be divided broadly under (1) capital investment and (2) expenses of maintenance and operation. Will any one contend that private corporations can borrow money as cheaply as municipal corporations? When it comes to raising the necessary funds for the capital investment, the municipality can sell its bonds at better rates than the private corpora-



tion. In the city of Omaha, where I live, municipal bonds bring a premium that reduces the interest rate down to approximately four per cent, while the public service corporations have to float their securities on a six per cent basis and often at a discount, and I have reason to believe the same is true generally throughout the country. It is sometimes contended that the municipal corporation will have to pay more for its building sites and construction work and that it cannot buy its machinery and installation materials as cheaply as the private corporation. There is nothing, however, to support this assertion, nor is it plausible unless we assume that the public officers are recreant to their trust and that private corporations are not as liable to suffer from dishonest or scheming employees as the municipal corporation. The manufacturers of electric machinery certainly stand as ready to sell to municipal corporations as to private corporations without discrimination as to prices.

Of the expense for maintenance and operation, the principal items are those for supplies and fuel, for wages and salaries, for depreciation and repairs. What I have said with reference to the purchase of machinery applies with reference to supplies. There is no good reason why the municipality cannot buy as cheaply and effectively as any one on the market. These purchases are usually made by contract awarded on competitive bids whether they affect a municipality or a private corporation.

#### QUESTION OF COMPARATIVE SALARIES.

When it comes to the question of comparative salaries and wages, we can cite testimony in the report of the Commissioner of Labor, already referred to, which contains a table covering these points within the respective groups into which the plants are classified, with this comment:

"So far as salaries are concerned the average cost in municipal plants is

smaller in every group presented, in some cases being less than half the average cost in private plants. As regards wage costs, it is seen that in seven of the groups shown the average cost in the municipal plant exceeds that in the private plants, while in eight of the groups this cost in the private plants is greater than in those municipally owned and controlled."

From this we would be safe, certainly, in concluding that municipal plants are at no disadvantage.

As to repairs, wear and tear, and depreciation, the ownership of the plant will make no difference unless we take it for granted that the men in control of one class are less efficient and less competent than those in control of the other. Accidents are no more likely, nor the rate of depreciation more heavy on account of the ownership of the plant.

#### COMMERCIAL BUSINESS.

In figuring on the financial saving effected by municipal ownership, we must remember that substantially all the private plants engaged in supplying electric light have a large commercial business in addition to their contracts for street illumination. In fact, for most of them, the contract for city street lighting is simply a nest-egg, while the more profitable part of the business consists in selling electricity to private consumers. In some cases private ownership undertakes to furnish street lamps at moderate, or even losing prices, as a consideration for the privilege of exploiting the commercial lighting field. On the other hand, the municipal plant has not always been allowed to engage in commercial business, but very often has been compelled because of legal limitations to confine itself to supplying street illumination for the municipality alone.

In his notable investigation Labor Commissioner Wright feels called upon to explain that in many cases his table

(of comparative cost of production) shows that:

"In municipal plants the income from private users during the year exceeded the cost of production and that apparently the city not only obtained free electricity for its own use, but made a profit besides, while in other cases, mainly in the smaller plants, the cost of electricity used by the city was extremely high. In the former cases the prices charged private consumers by the municipal works were sufficiently high to reduce the cost to the city of its own electricity to a very small sum, and indeed in many cases to nothing, in addition to showing a large profit on the service. In the latter cases, in which the cost to the city was apparently large, the condition may be due to one or more of a variety of causes. In some instances a high cost may be accounted for by the fact that a small price is charged to private consumers and the income from this source being very small, the proportion of cost to be borne by the municipality and chargeable against the electricity used for public service becomes correspondingly large; further in small towns and cities where the service is limited the cost of operation is almost as good as would be demanded by a greater amount of service."

In analyzing the table I have constructed from the annual compilations of the statistics of cities already mentioned, I have noted that of the thirteen cities of over 30,000 population, two, namely, Tacoma, Wash., and Tauton, Mass., are apparently unique in doing business on a strictly commercial basis. For the year covered by the September, 1902, report, the city of Tacoma is credited with receipts from sales of electric light aggregating \$84,485 for the year. Its expenses of maintenance for the same period were \$69,251, so that the city secured all of its 335 street lamps without cash outlay and had, besides, a surplus of some \$10,000 to offset the interest on its investment and the depre-

ciation of its plant. According to the same source of information, the plant at Tauton took in a yearly revenue amounting to \$29,747 paid for commercial lights, while its expenses of maintenance were \$29,247, leaving a difference of \$500 in addition to the use of 247 arc lamps for street illumination as an offset against interest charges.

If this shows anything they indicate that it is the lack of revenue from the commercial business that reduces the financial saving effected by municipal plants cut off from private patronage to which the people of the respective municipalities are entitled.

When it comes to efficient service and reasonable prices to private patrons the municipal plant again has the advantage. As the report of the Labor Commissioner declares:

"In municipal plants profit is not usually considered as an object and the prices charged are not so generally fixed as to earn a per cent on the investment, unless, as is frequently the case, outstanding bonds render interest a charge necessary to be earned."

In another place the commissioner refers to the fact that by far the greater number of private plants show a good profit, the per cent reaching as high as 69.45 in one instance. That such profits are incompatible with reasonable rates to the public goes without saying.

#### SUMMARY.

The real question then is whether it is better for the municipality to operate its own electric lighting plant or to reserve to itself only the right to regulate with compensation for the franchise either by fixed money payment or profit sharing arrangement. If financial considerations alone were to govern, the answer would depend upon the terms agreed to, although it is hard to see how, if the city may rightfully claim part of the profit on the percentage plan, it may not with equal propriety and justice do the work itself and take it all.



But other considerations ought to weigh as well. The city owes it to its citizens, who may be private consumers of electric light, to protect them against exorbitant charges, and it can do this best when it is alone interested as owner and operator. Again, the promotion of civic virtue would strongly counsel the removal, or at least the minimizing of the festering sore of political corruption

invariably produced by the barter and trade of valuable franchise privileges. Municipal ownership of electric lighting may have to wait its turn among the many demands urgently pressing upon the resources of our American cities, yet no progressive program of contemporary municipal reform will without it meet the requirements of current popular thought.



## PROPER DISTRIBUTION OF STREET LIGHT.

BY W. S. BARSTOW IN MUNICIPAL JOURNAL AND ENGINEER.

The lighting of the streets and thoroughfares of villages, towns and cities has recently been exciting attention because of the apparent lack of proper development of past years. The terms "illumination" and "candle-power" have always been synonymous in the minds of the public, until that beautiful example of lighting at the Pan-American Exposition proved the effective results that could be accomplished by a proper distribution with units of small candle-power.

### EARLY DEFECTS OF ELECTRIC LIGHTING STILL PREVAIL

When several years ago the electric arc lamp was first used for street lighting, the result, owing to the dense shadows and continual flickering, was, although a brilliant light, a very unsatisfactory illumination. In an effort to correct the defect the lamps grouped together and suspended from the top of a tall tower placed in the city square, or above the street intersection. This produced a moonlight effect, but the dense shadows cast by the intervening foliage and the very great waste of light, condemned this method after a short trial. The lamps were then arranged over the same area at street intersections, suspended from long, projecting arms so as to hang about twenty feet above the pavements, and this system has re-

mained more or less effective up to the present time.

During the evolution no effect was made toward a permanent or artistic installation, the municipalities and companies being content with short term agreements which did not permit either to enter into any construction calling for a large expenditure of money. Some of the cities of Europe were probably the first to seek a combination of the artistic with the useful, although to-day there are good examples of such in this country in some of the large cities.

Gas lighting, although the predecessor of electric lighting by many years, assumed an air of permanency from the very start, owing no doubt to the necessity of an underground distributing system. The expense involved in the installation of such a distributing plant gave to the companies more or less of a monopoly, and enabled them to expend sufficient of their capital to erect at the outset more or less ornamental fixtures. The original subdivision of gas light as first installed is even at the present time a good example of an efficient method of illumination. The increase in the unit of light by the use of the Welsbach mantle has been a marked improvement which today easily meets all the demands of modern service.

### ALL STREETS SHOULD BE WELL LIGHTED.

A municipality in the lighting of its thoroughfares should never be content with one or two brilliantly lighted business streets, but should strive to secure as well a general efficient illumination over its entire residential and factory districts. The location of lamps, either gas or electric (especially in the residential sections), should be made in the summer time, for if made in the winter, changes will without doubt have to be made, owing to the foliage and resultant shadows.

If gas is used as the illuminant, no more effective lighting can be secured than by placing the lamps every one hundred and twenty-five feet on each side of the streets on the curb line, with two at each street section on diagonally opposite corners. The posts should not exceed ten to twelve feet in height, and they should be spaced so that those on one side of the street are opposite a point midway between those on the other; they should be located so that as few shadows as possible are thrown across the sidewalk or driveway by trees, posts or other obstructions.

If electric lighting has been decided upon, a careful consideration must be given not only to the location of the lamp itself, but to the class of lighting (whether arc or incandescent) to be employed. For residential streets, where there is an abundance of foliage, the incandescent lamp is best suited; the distribution should follow closely that mentioned above for gas lighting. The lamp itself should be placed vertically, hung from socket placed in reflector of a bracket. The average size lamp should be not greater than thirty-two candle-power; excellent results are secured by a standard of twenty-five candle-power.

Within the last year installations have been made with the Nernst lamp, an efficient glow lamp ranging in size from

sixteen to five hundred candle-power. The light given is soft and diffused, the color more nearly approaching that of the arc than the incandescent lamp. When installed for street lighting, the lamp should be carefully protected from the elements and used with bracket suspension in the same manner as the incandescent lamp. The size of the unit will depend upon local conditions, but as in all other forms of lighting, lamps of small candle-power well distributed will give the best results.

### THE ARC LAMP BETTER SUITED TO BUSINESS STREETS.

For business and resident streets, where there is no foliage, arc lamps are more efficient, especially where a brilliant illumination is desired. In all such cases the enclosed type of arc lamp (that using a small inner and large outer globe) is more effective, because the light is steady and devoid of all flickering, is evenly distributed and there is an entire absence of all shadows from lamp parts. While in the past, diffusion of light has been attempted with the old style open arc by the use of ground or opalescent glass globes, it has been obtained only at a great sacrifice to candle power, and in no case has the continual flickering been eliminated.

The proper method of supporting the enclosed arc lamp can best be determined after a study of the locality. Span wire or mast arm suspension, whereby the lamp is brought directly over the centre of the roadway, although not ornamental, is well suited for the lighting of villages or towns, but it will be found that where trees intervene between roadway and sidewalk, dense shadows are often cast. In large cities the mast arm suspension prevails, the length of the arm being varied to suit the local conditions. The practice of placing the lamp directly on the top of the pole is rapidly growing obsolete, as poor distribution is the inevitable result.



In recent years many municipalities have endeavored to secure an artistic effect in lighting, and in several instances where the municipality itself could not assume the expense, the excess cost has been borne by the residents or merchants. There is no reason why this practice of sharing expense, so common in other city departments, should not apply to lighting and the streets beautified by handsome and permanent fixtures. In some instances at the present time such fixtures, permanent and ornamental, are owned by the municipality, and due allowance for their use made by the companies supplying the service. In other cases, where long term contracts are entered into, frequent adjustment of rates being provided for, the companies have been warranted in attempting permanent construction. In several western cities arches of incandescent lights are used on the business thoroughfares, the expense of which, however, is borne by the merchants themselves, who consider the ornamental feature as a paying advertisement.

But it must not be assumed that artistic and effective lighting can be accomplished only from an underground system with highly ornamented iron poles, for there are today many cases where in small towns and cities the expense of an underground system of distribution would not be warranted.

#### WHAT THE AIM SHOULD BE.

The aim of the municipality in its street lighting system should be the reproduction as nearly as possible of the diffused effect of daylight, which effect can be approached only by many small, well distributed and located lights, and never by a few single lamps of great brilliancy.

The lighting of public buildings should receive the same care and attention in the selection of lamps and their distribution, and every effort should be made to have the installation a perma-

nent one. The tendency in public building lighting is to employ lamps of higher candle-power than necessary, using thereby fewer lamps in order to reduce the first cost of installation. This policy not only tends to extravagance in the use of the illuminant, but is never productive of the best results. The same careful attention should be given to public as to private enterprises, and especially where the service is continuous and necessarily contracted for on a meter basis.

In recent years there has been a sudden development in commercial lighting along public thoroughfares. The progress of the electric advertising sign has been so phenomenal that today in many of the streets of the large cities by extinguishing of the street lamps, for the time being, would hardly be noticed. The encouragement of such lighting is, no doubt, to the public interest, and yet a certain amount of supervision should be exercised by city authorities in order to preserve a general artistic appearance.

In the lighting of its streets, parks or public buildings, the municipality should appreciate the fact that in such lighting, whether by gas or electricity, "candle-power," or, better still, gas or electric energy, is purchased only as a means of effective illumination, and that the careful selection and location of the lamps have as much to do in attaining the desired result as the lamps themselves.

Drinking fountains of a novel style are being introduced in the public parks of Cleveland. The pipe of a faucet projects vertically from the center of a bowl and when the valve is opened a stream shoots into the air perpendicularly to the height of four and a half inches. The drinker places his mouth over the opening and drinks from the spurting stream. The sanitary advantage of doing away with a cup for common use is obvious.

## STREETS AND PAVEMENTS.

BY D. E. W. WILLIAMS, C. E. \*

### THE NEED OF GOOD STREETS.

The appearance of the streets of a city is what first attracts the attention of the traveler. Properly constructed roadways, clean pavements, and well-kept sidewalks are outward signs of a progressive community that never fail to impress the visitor. To induce desirable immigration care must be taken to make the first impressions agreeable, and in this the thoroughfares play such an important part that municipal authorities generally are giving greater attention to street improvement every year. In no state is this movement more marked than in California.

There really is no one who, of choice, prefers no pavement at all to a well-constructed roadway and the only objection that is ever heard to street improvement is that it would cost a great deal of money. As something cannot be had for nothing, this is very likely true. But the returns would offset the expense, for, with good roadways making the outlying districts easy of excess, there would be an increase in the valuation of property all over town, and landlords would get their returns almost immediately in the increased income from rents. This has been the experience everywhere.

By street improvement is meant real improvement and not pottering with things as they are, for it is useless to expect good results from temporary work.

One of the highest authorities on this subject, H. P. Boulnois, says: "The pavement most suited to the traffic is the cheapest in the end; the cheapest at first cost is the dearest in the end." It is well therefore, to explain to the taxpayers and citizens of Fresno what the requisites of a good pavement are and how to fit these requirements to the local conditions of soil and climate. Such is the purpose of this discussion of

the subject.

### REQUISITES OF A GOOD PAVEMENT.

In discussing roadways it is customary to talk at greater or less length of the ancient Roman roads and it is well to remember that some of them are in use even to this day; but modern engineers construct better thoroughfares than did the Romans. All Roman ways were alike while modern builders consider the value and kind of traffic that is to be borne and give attention to the gradient and to the materials easily procurable. Different materials are required for different grades and to follow the contour of the ground is sometimes a means of getting a better road than to follow a straight line regardless of obstacles. The Roman road was, however, built in an nearly as possible a straight line and the principle of its construction was the same on hills or flats. In rude districts the road might not be made of such well-selected materials as elsewhere, but the plan of construction was almost always the same.

Modern roadways are not constructed in that manner. The scientific road-builder considers the forces of gravity, collision, friction and resistance of the air, which must be overcome or lessened, and his aim is to do this by providing a firm, hard roadway, with an easy grade and a surface that will be smooth and yet give sufficient foothold for horses. Having decided from which of the materials at hand he will make his road, supposing the kinds from which he is to make his choice are several, he estimates the force required to move a given unit on each kind of material and considers the gradient at which it would be unsafe to use any one of the materials—thus, supposing him to be compelled to consider so steep a grade as 30 degrees, he would not use



so small a surface. From the physical point of view he now has a knowledge of the comparative merits of the materials before him. It is then necessary to consider what may be termed the "economic" aspect of the matter—the cost and the traffic.

#### THE QUESTION OF COST.

The question of cost cannot be neglected, as the property owners who pay the greater proportion of the expense have rights that the municipal authorities must respect; and the authorities, usually taxpayers themselves, look at the matter from the point of view of the property owner every time. The owners of vehicles that use the roadway have rights, too, and they must be considered—that is, basalt blocks, for instance, should not be placed on pleasure driveways. The description of traffic, indeed, counts very largely in the selection of the material and the authorities in making this selection must consider whether the buildings that abut on the street are used for business or residence purposes.

#### THE TRAFFIC.

In estimating the volume of traffic different methods have been adopted by different investigators, but a plan that has met with favor is to station a man at a given point to note the number and kind of vehicles that pass. This vehicular movement is reduced to tons per square yard. Felicities for obtaining the material must also be taken into consideration. While the Swedish deal has been pronounced by English engineers, for example, to be the best material for a wooden pavement, it would be absurd for the Californian with his unfailing supply of Oregon fir, or the resident of the Atlantic states with his Georgia pine, to go to Sweden for his material; and, taking into consideration the cost of the fir, it might be more advantageous in the interior of California, if a wooden pavement were desired, to utilize the pines of the Sierras and

other native woods.

The street pavement must be of material, too, the repair of which will not be often necessary and can be done at small cost. This material, further, must be such as to cause as little dust as possible in summer and as little mud as can be in winter, and it must be capable of being cleaned. It ought to be noiseless, in addition to these other requirements, and it should neither injure the legs and hoofs of horses by its jar nor should it be so slippery as to cause danger to traffic.

#### SOME GENERAL PRINCIPLES.

Whatever may be the material of which the roadway is to be constructed, there are certain general principles of roadway building that are accepted by all engineers. The foundation must be strong so as to carry the heaviest weights without subsidence. The width ought to be some multiple of eight, as vehicles traveling rapidly can pass each other safely if allowed a clear space of eight feet. The shape should be such as to throw off all surface water at once, but the curve must not be too pronounced, as in that event wagons will be driven on the crown at the expense of of the side strips and the center of the roadway will be compelled to stand the wear of all the traffic on the street.

Viewing the subjects from a strictly modern point of view, there may be said to be two great classes of pavements for streets—those that have a concrete foundation and those that have not. Of those that have not, there are two systems—the telford and the macadam, though strictly speaking, macadam is not pavement, and both are more in use for country roads than they are for city streets. The difference between these two cannot be stated better than in the succinct sentence of Maurice O. Eldridge, chief of the bureau of road inquiry in the Department of Agriculture of the United States—"The principal difference between these two constructions is as to the propriety or ne-

cessity of a paved foundation beneath the coating of broken stone. Macadam denied the advantage of this, while Telford supported and practiced it."

#### MACADAM AND TELFORD.

Properly made, the roadbed is prepared in the same way in either the telford or the macadam. It is dug out and leveled, depressions being filled and the flooring, so to call it, being rolled compactly and firmly to the shape intended for the finished roadway. In the macadam system the coarsest stone from the crusher is now laid on this, all the pieces being of as nearly uniform size as possible. For a road thirty-two feet wide the thickness at the center would be eight inches and it would be well to lay it in two courses of four inches. These courses may be of brick, or broken stone from old buildings, or, as at Cleveland, O., that may be of what is known as slag—the dross from the iron furnaces. On this foundation is laid the surface material after the foundation courses have been rolled firm and a hard surface has been obtained. As soon as the surface metal is placed on this it is rolled, wetted and the macadam roadway is complete.

In the telford system, the foundation is composed of stones of various sizes, not exceeding ten by six inches on the broadest side nor three inches on the other. These are placed with the broadside down and in parallel lines to the center of the street, in herringbone fashion, being firmly wedged and all projecting points knocked off. In a roadway thirty-two feet this foundation course should be eight inches at the center and six inches at the curb. The interstices are filled in and the whole tramped firm. On this foundation is laid a course, four inches at the center and three at the gutters, composed of clean, broken stones ranging from one to three inches in size and free from all dirt and dust. This is to be rolled to the arc of the finished roadway,

which, in the case of such dimensions as those mentioned, would be one in twenty-seven. Now comes the surface layer, composed of broken stone that will pass through a two-and-a-half-inch ring. This is to be two and a half inches in depth. Clean sand is then thrown on this and it is to be wetted down. Then the roller is called into requisition and the whole is rolled as firm as it can be. The rolling and binding ought to be completed in one day and thereafter the roadway must not be softened by excessive wetting.

#### CONCRETE FOUNDATIONS.

As the result of years of experience in the pavement question, a concrete foundation is used in every city of the world that makes any pretention to progressiveness, whatever may be the material composing the surface metal, because, as F. A. Kummer said in a recent paper before the American Society of Municipal Improvement, "the concrete foundation is a necessity for all permanent pavements."

In general the thickness of the concrete should be such as will be required by the traffic; but, for a permanent foundation the roadbed must be excavated, levelled, all nepressions filled and the whole tamded down and rolled. On the flooring thus prepared, broken rock to a depth of from six to nine inches must be laid to countour and rolled. A boiling mixture is then poured over the whole surface, filling all the interstices and this may be floated to an even surface with a grout of Portland cement and sand, or, what is esteemed the better method, a cushion of sand may be laid on the concrete and shaped to the contour with a template. When the traffic is reasonably light this thickness of the concrete may readily and with quite satisfactory results be reduced by half.

Assuming that there has been provided a concrete foundation, the top metal may be: 1, bitumen (asphalt); 2,



stone blocks; 3, wood; 4, gravel; 5, brick.

#### BITUMINOUS ROCK.

The bituminous pavement may be of the natural bituminized rock, or it may be the artificially mixed asphaltic paving material. In either case the percentage of bitumen ought not to be less than seven or more than 12 per cent and an average of 9 per cent would be best for a warm climate. The natural bituminized rock is generally melted in large lumps and placed on the concrete foundation after being thus melted, but this is not the method that is approved by modern municipal engineers. Their plan is to pulverize the material to pass through a mesh 0.01 of an inch square. This powder is heated in revolving cylinders to between 240 and 250 degrees F., and while hot is laid on the concrete to the depth of two and five-eighths inches, the concrete being absolutely free from moisture. The powder is tamped lightly and afterwards is rammed with a heavy "punner" and is then smoothed to surface section. In a few hours it is sprinkled with sand and the roadway is ready for traffic.

This kind of pavement is easy to repair and does not absorb the heat. On the other hand, horses are liable to slip and fall upon it, and, while this can be overcome by the use of sand, yet the sand is ground by the tires of vehicles and wears away the pavement. Asphaltum pavements have come into universal use and in general have given complete satisfaction.

#### STONE BLOCKS.

Stone blocks are necessary when the traffic is heavy. They are laid on a concrete foundation, where the pavement is to be permanent, and are found in those parts of nearly all large cities where there is a great deal of hauling. They are noisy and hard on the legs of horses, although the latter objection has been somewhat overcome by laying the blocks diagonally. Granite with field-spar, close-grained and having little

mica, makes the best stone blocks, with basalt ranking next. The blocks should be set four to every fourteen inches and with narrow joints, the contour being the same as in the case of asphaltum pavements. The base of the grouting should be a weak cement and over all there should be placed a light layer of gravel.

#### WOOD.

Wooden pavements are in use in this country in such cities as New Orleans, Boston, Indianapolis, Galveston, Terre Haute and other municipalities of similar standing in the movement for municipal improvement. A concrete foundation is essential. The old Nicholson pavement, consisting of wooden blocks that were chosen, without regard to their fitness and were laid on the earth without any under course, demonstrated that fact, if it did nothing else. The wooden pavement of today is composed of blocks preferably 4x4x9 inches, the face being 4. These are cut die-square, with the fibre vertical, from wood that is sound, free from sap, close-grained, uniform in quality and free from knots—not necessarily seasoned, though, as, according to Boulnois, a little life in it has been found to be beneficial.

These blocks, with a grouting of asphaltic cement, and laid either on the smooth surface of the concrete foundation, as in Paris, or else on a cushion of sand, itself resting on the concrete. A grout of pitch is used advantageously where there are no high temperatures to be encountered. By creosoting the blocks, as is the custom, they are less absorbent of moisture and form an ideal anti-septic pavement. The wood may be native pine if necessary, though on this coast the best wood is the Oregon fir.

Laid in this manner, wooden blocks make the best pavement known for a city where there are hot summers, as the wood radiates very little heat. Such a pavement, too, can be cleaned at less

expense than any other kind. It gives a good foothold for horses and produces the least noise of any pavement yet tried. In London it is estimated that there 4,000,000 square yards of wooden pavement. In Paris it is equally popular and, according to the statement of Mr. Kummer in the paper already referred to, the wear is actually the same as that of granite blocks—that is, ten years in Paris, which would be equal to twenty-eight years in New York and fifty years in San Francisco.

#### GRAVEL.

Gravel roadways have much to be said in their favor, when laid on a concrete foundation with a gravel that packs well. Such a pavement radiates little heat, is comparatively noiseless, gives a firm foothold to horses, and is smooth. It is not easily cleaned, however, and consequently ought not to be laid in a city street without considerable investigation. Without a concrete base, gravel has been used with success on country roads, when laid on a carefully prepared earth flooring, with sub-drains to remove the seepage of water under the surface course.

Whether for a roadway with a concrete foundation or not, the gravel must in all cases be clean, angular and tough and not rounded or water-worn. Much of the so-called gravel, however, is nothing but a coarse sandstone and in selecting the material expert advice should be secured. The layer of gravel should not be more than six or less than four inches in depth and should be carefully rolled.

#### BRICK.

In Holland brick pavements have been used for centuries and in many of the other European countries they have been utilized in stable areas and similar places, though not streets. There is evidence that they were used by the ancients and there is no reason why, when an economical pavement is desired, they should not be more gen-

erally adopted everywhere. In this country there are brick pavements throughout the entire Mississippi valley and the city of Buffalo has several streets laid with this material that give general satisfaction. Bricks when used as street paving material do not absolutely require a concrete base; but, with such a foundation, they are laid on edge. Without a concrete base, they are formed thus: The first layer of brick is on the flat on a sand footing. On this a second layer of bricks, which, like the first, must be of a firm consistency, is placed each on the edge, either with a light grouting or with a binding material of sand or gravel. Such a pavement is an excellent one where the ground surface is deep and not easily dried. The crushing weight for a good brick is much greater than many people imagine and such pavements will sustain a very heavy traffic, but their lasting quality under such a strain cannot be compared to that of stone blocks, wood or bitumen. It may be summarized that the brick pavement is the best of the cheaper class.

#### SIDEWALKS.

Sidewalks should be composed of the best material at hand and in general, what has been said about pavements will apply to them. They should have a slight slope from the property line to the curb and the curb must be of such material as will stand the work required of it. In cases where the streets are narrow and the traffic is heavy, the curb, when of granite or syenite, as it usually is, is splayed off on the face. Although granite is in general use, the most modern curbing is of fire clay or steel and is shaped to meet the requirements. These curbings are pronounced to be more satisfactory than stone and are said to cost less in a given period.

Properly laid sidewalks of cement are neat and, in residence streets, where the whole sidewalk space is not occupied by the walk and there is a space of green between the walk and the curb, are



particularly attractive. The objections to cement are, in a sunny climate, the glare and heat, which coloring matter will not successfully overcome; and, in any climate, cement sidewalks are hard on the feet, as there is no elasticity to them. Brick makes a good material for sidewalks and is cheap. It should be compact, if possible, of fire clay; but ordinary brick can be used to advantage and is far better than no pavement at all. When laid on a light concrete foundation—say three and a half inches,

but not less—bituminized rock makes an excellent sidewalk pavement because it is cool, elastic and easily cleaned. Laid on rolled earth or sand, it cracks easily and has frequently to be renewed, so that it proves expensive in a comparatively short time.

\* This article is portions of an elaborate paper on the subject indicated, prepared for and published in the Fresno Republican. All matter relating to the local conditions of that city have been eliminated leaving information of general interest.

## IMPROVED STREETS AND THEIR REPAIRS

BY W. F. RAYMOND, INDIANAPOLIS, IND.

Beginning with asphalt, as from that most comparisons may be drawn, other pavements will be treated of in due course. The repairs necessary to an asphalt pavement are by no means based on any standard; they are determined upon and made in various ways, and usually ordered by an inspector, whose knowledge of asphalt paving may have been neglected. First, where the pavement is worn out, disintegrated or badly cracked, the pick and cutter are used in gutting "back to a joint," and in this one first operation lies the ultimate success or failure of asphalt patching. When gutting a joint for a patch in asphalt the hole should be cut back in every direction, so that when refilled and surfaced the patch should show the true grade of the street, with no water standing on either the patch or any of its joints. This necessarily demands that more area must be taken out, but the wear of the street by such method would be increased over fifty per cent. This is especially true in all cases where the pavement is rolled or cupped. All hollows (cups) should be cut out; all high places (rolls), too; then when relaid the wearing surface is true to a uniform grade, with no abnormal strain at any point, and the pavement is bound to wear far longer than when left full of rolls and cups.

To go through in detail the process of repairing asphalt takes one through the following work: The joint is chosen and marked, the old material is cut out to the joint (the new joint being cut as smooth and as perpendicularly as possible), the hole is then swept clean and dry; it is then painted, either with very hot asphalt cement, a high grade bitumen or a suitable coal tar product. This done, it is ready for the surface mixture. If the hole is deep, in lieu of a binder (asphalt, cement and small broken stone or specified gravel, heated and mixed hot), this is put down in two layers, the first known as cushion. It is thoroughly tamped along the joints and smoothed across; the top or wearing surface follows and should be thoroughly "combed" by the rakers. The first joints should be tamped hard and with great care. After tamping the joints, smoothers should follow to close the surface and give compression. Cement is then swept over the patch, which should immediately be rolled, preferably by a roller of not less than five tons' weight. Patches of any size or shape containing over five square yards of surface should be surface-rolled—i. e., rolled immediately after being raked and tamped and before being smoothed. This rolling closes the surface, gains the very best compression and precludes any possibility of burning

the material while being laid down. Good rolling is essential to good work and must ever be exercised by the roller-man to get all marks out and to guard against cutting a joint with the edge of the roller. In all cases where possible patches should be cross-rolled. In many cases of rolled and cupped asphalt pavement a surface heater may be used to good advantage; in all such cases the joint is cut (after heating) with either a hot hoe or shovel.

The Economic Asphalt Street Repairs Company has lately put on the market a surface heating machine which to the writer seems a very valuable adjunct to the many devices already used in repair work. By its use good joints should be assured and a cost saving of no mean proportions; for, while it of necessity works over a larger area, it more than equalizes this item by the small amount of new material necessary under its operation. So far as the skilled labor and process of laying work following surface heaters is concerned, it should be as described above with the exception of joint-cutting and painting. From the standpoint of labor, asphalt repairs cost far more than do repairs to other materials, for the labor must needs be trained and efficient and under the constant interest and care of a thorough, competent man.

In repairs to brick pavements an entirely different proposition is presented, one apparently easy of solution, but withal quite difficult; there is the same "joint" to find and determine, and in cases of badly worn streets this is all but impossible, unless a jog or bump is left after repairs have been made, by virtue of the fact that the new brick used in repairs are so much deeper than the old worn ones. The joints in courses should be broken and another difficulty confronts the operator in gutting the old brick out without loosening the courses to be left—for once loosened they can never be made so tight and true to grade as originally. The best way not to loosen the courses to be left is to sacrifice a few

bricks by breaking them. The others may be readily loosened by good use of a sharp pinch bar, carefully handled. The old and worn brick once out, the old sand cushion loosened, or, preferably, replaced by fresh, the new bricks are laid in proper fashion. They should be very thoroughly rammed, then grouted with a mixture of one-third good Portland cement to two-thirds clean sharp sand. This grout should, at first, be quite wet, so that all joints may be filled; later it may be made stiffer and a broom in good hands will soon fill all voids. In many cases it is well in joining old bricks to new to chip the new ones a little on the under side, thus leaving them nearer the level of the old, and saving the jog before mentioned. In many cases a bituminous filler is used, but for small repairs there can be no question that Portland cement grout is superior. The joint in brick repairs must be carefully selected and made, but under no condition or circumstance can it be so good, neat or perfect as a joint in either asphalt or bituminous macadam.

Repairs to grant block streets are very similar, almost identical to those described above for brick, although in many cases the old block may be turned bottom side up—thus saving new—and affording at the same time a more uniform grade. The grouting would be the same as for brick pavement.

Wooden block streets of all kinds (except round cedar) are repaired in a manner quite similar to brick, but greater care must be used in making the joints, where allowance for expansion is demanded. The joints may be filled with fine clean sand, but preferably with a good elastic bituminous filler, heated to a high degree of temperature and poured very hot. This filler, if of the proper kind, is very elastic and will be sufficient for all expansion to which the blocks are subjected by elementary forces. To revert for one moment to brick, in large patches of new brick a good bituminous filler should be used, or



allowance otherwise made for expansion. In all cases where block pavement is found to be raised by expansion it is by no means right or proper to roll or ram it down, it should be taken up and properly relaid with, of course, adequate expansion allowance. The necessity for expansion joints parallel to each curb or gutter in streets paved with wooden block has caused many a defect, either one course of block has become worn and broken, the cement gutter has become worn and disintegrated, or, more generally, defects are prevalent in both first course of block and gutter. In all such cases repairs are both difficult and costly and it is hard indeed to decide on the proper course to pursue. Usually it would be best to re-lay the course of damaged blocks, to re-pour the expansion joint with a good elastic filler—first, however, having repaired the gutter. Should the gutter be of cement it may be repaired by picking off the finishing coat, but preferably deeper, then with a very rich Portland cement mixture (say about one-half cement to one-half sand, with granite screenings added), the gutter may be brought to its original grade. The newly laid cement should be graded for at least thirty-six hours, and no sooner should the hot filler be poured. Gutters of brick or other material should be repaired as would streets paved with like material. In many cases where wooden blocks are found to be worn it may become necessary to culp the new ones, else a very unsightly disagreeable jog will remain after patching with new blocks against old ones. The new block should be chipped on the under side, the bed of sand being made to conform with all irregularities in the under surface of the block, as in the case of brick.

With bituminous macadam again is found a very different process for repairs—not, however, unlike asphalt. The chief difficulty will be in cutting out for the "joint," as the pavement becomes very hard and tough, while some of the

base to which the top is firmly bonded will necessarily come up when the latter is disturbed, unless a surface heater is used. The hole once ready, the base having first been thoroughly tamped and coated with bitumen, the joint found, it is simple to put in the top mixture, level it with rakes, to tamp and roll it. After it has been rolled until the roller leaves no marks a light pouring of reduced bitumen is made over the patch and some hot sand and screenings are spread over it and it is once more rolled. No sheet street can boast of so simple yet efficient construction and repairs as bituminous macadam, for the mixture for repairs can be readily made on the street and may be put down by a fairly bright laborer. For this and other reasons, not mentioned here, bituminous macadam is today undoubtedly one of the best and most economic pavements. Like asphalt, good rolling and plenty of it is essential to this pavement, and to the credit of bituminous macadam be is said that the compression it receives in rolling per square inch of surface is from three to four and one-half times greater than asphalt receives.

Rock asphalt is best repaired by use of a surface heater, the hole once ready, the process of laying consists simply of raking, tamping and rolling.

Flint rock macadam and ordinary macadam repairs must needs be determined by circumstances and conditions. Of flint rock macadam it may be said that the process of construction is as yet too crude to allow of any definite course being laid down for repairs, the roller compression given the pavement in process and on its final course being entirely inadequate to insure a lasting, true surface or smooth street. The top (binder) course is too sparse and unevenly distributed and receives far too little rolling; usually none at all. Hence the method of repairs must be left to the future. With ordinary macadam holes may be first roughened with a sharp pick, after which a good binding gravel

or small broken stone may be used, preferably with a little cement—at any rate with plenty of water and with plenty of rolling with a heavy roller.

In general the same is true of all—find a good joint, have all headers, curbing and gutters in good shape. Repairs may then be expected to hold advantageously if properly laid of good standard material. It is noteworthy here that California (Obispo), asphalt seems to form a tighter bond to old material than does the much used Pitch Lake Trinidad.

Many, if not all, municipalities could undoubtedly save money, at the same time improving their streets, by having a well-equipped repair plant suitable for asphalt and bituminous macadam, together with brick, wooden block and other material suitable and necessary for street repairs. Above all it is poor economy to put in cheap, scant repairs of any kinds, for in all cases the better the repairs, as to materials and workmanship, the better the pavements and the more money is saved the municipality.



### Manila's Water Supply.

Manila and its outlying districts are shortly to have a new and more extensive water supply, which will insure greater purity and an increase of quality equal to three times the present supply.

The necessity of improving the water supply of the metropolis has been evident ever since the recent cholera epidemic. Since that time the military and constabulary have been active in patrolling the Mariquina river from the intake up to its source; also in guarding the single pipe line from El Deposito to the city, in order to checkmate the threats of many desperate characters. The civil commission, realizing the urgent need for a more perfect system of supply, decided some time ago to give the city what it needs and also eliminate the hardship now imposed upon the native above the intake.

These people have from time immem-

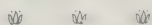
orial looked upon the Mariquina river as their personal property, to use as they like, for bathing themselves, washing their clothes, wallowing their carabaos and draining their sewage.

The new source of supply will be moved up the river some forty miles and and two miles or more above Montalban. At the proposed point of intake the country is uninhabited near the banks of the river; and the nearest population consists of a few Igorrotes, who live well up in the foothills and mountains, so that the danger of contamination of the water is reduced to a minimum.

According to the plans of improvement under contemplation, the present pumping station will be of no further use, as the source of supply will be elevated nearly eighty feet higher than the present one, and the natural force of gravity will bring the water to the reservoir at El Deposito with three times its present pressure. A new and modern receptacle will be built on the site of the present antiquated one. It will be built above ground.

The water will be distributed throughout the city and suburbs by at least six pipe conductors of smaller diameter than the present single one. This will insure Manila against being totally cut off from a supply of water.

A large dam will be constructed across the river and will be built from the granite which abounds in the immediate neighborhood. This work will be comparatively simple, as the stone needs but to be blasted out into the stream from the high banks on either side. This dam will be of great strength and will be reinforced by a long gradual downward slope to the southward. —Municipal Engineering.



### Public Play Grounds for Washington.

The committee on public playgrounds of the Associated Charities, recently organized at Washington, D. C., held its first meeting, June 11. The condition of



three public playgrounds was reviewed. The first is a small playground in the rear of "Neighborhood House" at 465 N-st southwest, which was reported to have been successfully active for the last year. It is fairly well equipped with apparatus, and it turned over to the general fund \$25, which has been placed in the hands of the treasurer for the further equipment of this yard. This playground is used mainly by girls and small children.

A second playground occupies a very large area, extending from Sixth to Seventh-sts. on M-st. Southwest. This playground has recently been made available through the kindness of the district commissioners, by whom the square had formerly been rented for the storage of stone and other building materials. The ground has been largely cleared of these materials and room has been afforded for the laying out of a base ball diamond and the erection of playground apparatus. A special fund has been contributed for the purpose of clearing this ground and erecting the apparatus needed. A bid of \$200 has been accepted for erecting four swings, one teeter-ladder, one horizontal bar, two see-saws, six traveling rings, one inclined ladder, one set of sliding poles, one giant stride, and one sand box. In addition to this the committee decided to put up a punching bag with overhanging drum, which will probably add \$10 to the initial expenditures for apparatus. In one corner of this playground ten model gardens have been made by ten children of the neighborhood, who are doing their garden work under the direction of instructions. The committee authorized the erection of a fence around these model gardens.

A third playground, to be used solely for colored children was reported as assured on M-st. southwest, between First-st. and Delaware. The ground is now in shape to permit of the erection of some simple apparatus. A small playground has also been opened at the

northeast corner of Tenth and V-sts. northwest, and the pastor of the Swedenborgian church, which adjoins the playground, has organized the young colored people of the neighborhood, who have themselves erected the simple apparatus which the playground now contains.

If the playgrounds are successful this summer, permanent playgrounds can be established next year with assistance from public funds.



### Mayor Stevens Says Something.

From the message of Mayor Stevens of Fresno are taken the following extracts: "Municipal work is fast becoming a science. The city with a graft is becoming a scarce article and the improvement is largely due to the efforts of municipal leagues. Our new charter has now been in operation for two years. Both the city officials and the public have had time to test it and are in position to judge of its superior value to our city. There are, however, some changes that should be made in it before it can be entirely satisfactory. I recommend that the Board of Trustees take the initiative in this matter and refer the matter of amending the charter to the proper committee who will take such steps as may be necessary to present the proposed amendment to the next session of the legislature.

Many reforms have been inaugurated by the present city government of Fresno and it is safe to say that they are appreciated by the masses. The man who does not appreciate progress and reform is the one who is regulated; when it is the other fellow it is usually all right. In the matter of regulating the liquor business, we have made the saloon licenses \$600 per year. Now as a matter of justice the saloons should have the business. Liquors are being served in some of the restaurants and other places without meals, to either men or women. Some regulation should

now be made that will adjust this matter so that a place cannot be a saloon unless it pays the saloon license. All drinks in restaurants should be prohibited except table drinks served with meals. That can be regulated easily by putting the liquor license of a restaurant on the same basis as that of other liquor dealers and making them revocable.

In regard to contracts, I am opposed to farming out the work of the city. I believe the city should take its own contracts as far as possible. The street springling, street sweeping, etc., should be done as is all other street work, by employees of the city and under the supervision of the proper officials. We can then not only regulate the quality of the service, but if there is a profit in the work the city will get the benefit of it.

The situation of matters concerning the outfall sewer in West Park seems

be progressing as favorably as possible but it is to be regretted that proceedings are so slow. The same fault is found with most public work; the official has no power to attend to business for the public in the same manner nor with the same degree of satisfaction to himself as he would in attending to private business. The same is true with supplies. The city always pays more for supplies under the present system than if we could go into the open market with cash and do business on a cash basis. I hope to see the day when our city will have a purchasing officer who can make purchases in the same manner as is done for a firm or a corporation. The present laws are to prevent corruption, but if an officer wishes to be corrupt no law will prevent him.

#### Little Parks.

The Brooklyn Eagle makes a plea for

# Booklets and Folders

Illustrated from Photographs

Will tell you about

## California Resorts and California Resources

Invaluable in Planning Your Vacation or for the Homeseeker.

Ask Agents for Lists, or call at

## Information Bureau

Southern Pacific

613 Market Street,

San Francisco, Cal.



small parks which is worthy of serious consideration. It says:

Before seeking to add large areas to our park system, for the benefit of the city at large, it behooves us to improve such properties as we have, and, as a general proposition, it may be said that all great cities need half a dozen small parks where they need one large one. We need not consider them as places of beauty, nor even as pleasure grounds; they have a sanitary purpose that is greater than any other; hence it is imperative that light shall be let in upon the dark places and air to districts where human lungs are starving for it. The big parks are needed, but they serve a different purpose from those at the doors of the tenements. They are visited and enjoyed by thousand, and they serve for purposes of recreation. But the little squares that should be dotted over the town are frequented by numbers proportionally far greater, because they are easy of access, the neighbors reaching

them without the expenditure of car fares—a pecuniary burden greater than some laborers with large families can bear, and they have a definite moral effect in preserving the order and cleanliness of the vicinity.



### Public Compensation for Street Car Monopolies.

In granting to traction companies a practical monopoly of a certain kind of use of the streets there are two things which the city should not surrender. One is the right to require from the companies good and adequate service. The other is the right to require that the service be rendered for reasonable return. The city should not only do something to impair these rights, but it should exercise them to such an extent that the companies cannot afford to make "compensation," as it is improperly called, and the monopoly granted

# NATIONAL ELECTRIC COMPANY.



## Dealers in Electric Supplies



Contractors for all classes of electrical construction.  
Power and lighting plants installed.



Phone Main 717

344 Post Street, San Francisco

them . . . The compensation should be made to the riding public. That part of the public should not be compelled to contribute in high fares and poor accommodations to the city treasury. The very best compensation, if you choose to call it that, is low fares and good service. It is compensation made with absolute certainty and without cost or waste in the collection or after. It is compensation made every day and every hour and it goes to those who are entitled to it—to those for whose use the whole service exists and who are entitled to the full benefit of compensation in the service rendered them or the equivalent of such compensation in reasonable regulation of service and fares. It is compensation to those who are entitled to it in the form of commodious and comfortable and wholesome cars, in reasonable speed, in reasonable transfer rights and frequency of service. The city has no moral right to deprive them of any part of this compensation to

put money in the city treasury, where it is pretty sure to meet the fate of money that comes easy.—Chicago Chronicle.

### Traveling Library System Inaugurated.

The Traveling Library System is now ready for introduction in California. As heretofore announced its inauguration is under the auspices of the Board of State Library Trustees. Librarian J. L. Gillis, of the State Library at Sacramento has charge of the work and has just issued the following circular giving the necessary information regarding the system:

The traveling library plan is for the distribution of books from a center to localities geographically remote.

The libraries are made up of fifty volumes, arranged under such subjects as: Ethics, religion, social science, natural science, literature, fiction, description

## Armstrong and De Guerre

407 Montgomery St., San Francisco

STATIONERS AND PRINTERS

Blank Books Made

Election Supplies For Municipalities.

## Redwood Poles

For ELECTRIC PLANTS, TELEPHONE,  
TELEGRAPH & POWER COMPANIES.

Union Lumber Co,

Rooms 205-7 Crocker Building,

SAN FRANCISCO.

Telephone Private Exchange 624



and travel, biography, history. They are sent out in cases accompanied by loan cards, and other details necessary for the care of books. Full instructions for the management of the library also accompany the outfit.

The library can be placed in school houses, churches, stores, or private houses. The care and circulation of the books is left entirely to the local officers appointed for that purpose.

#### TO WHOM LOANED.

On satisfactory guarantee that all rules will be complied with, traveling libraries may be loaned to any community without a public library, on application of five resident taxpayers.

The responsibility and identity of these taxpayers must be certified to by a Superior Judge. They must form themselves into a Library Association, and appoint a Secretary; who is to represent them in all their dealings with the State Library.

#### THE FEE.

The fee of \$3.00 for each library is payable in advance, and should be sent with the taxpayers' application. This entitles the Association to suitable cases, finding lists, necessary blanks, and transportation on the library both ways.

#### TIME LIMIT.

The library may be kept three months, when by special permission the time may be extended three months longer. At the end of the six months, however, it must be returned, and a new library will be sent.

#### INJURIES.

Notes, corrections of the text, or marks of any kind on traveling library books are unconditionally forbidden. Borrowing taxpayers will be held responsible for all losses or injuries, beyond reasonable wear.

#### CIRCULATION.

Libraries loaned on application of five taxpayers must be kept open for circulation during not less than one hour of three days of each week, with due public notice.

#### FREE USE.

Suitable fines may be imposed for injuries or over detention, but no membership fee or other charge is allowed.

#### SECRETARY.

The secretary shall care for the books while under his control, circulate them in accordance with the printed rules, and make required reports.

#### VIOLATION OF RULES.

Wilful violation forfeits the right to State loans.

## THE DOWNIE

# Eucalyptus Boiler Fluid

MANUFACTURED BY

Downie Boiler Incrustation Preventative Co.

W. P. FULLER & CO., - - - - 21-24 Front St. S. F., Cal.

J. P. K. OTIS,  
President & Manager.

EDW. P. KING,  
Treasurer & Supt.

UNION WATER METER CO.

WATER

Worcester, Mass.

METERS

Union Rotary Piston and Columbia Patterns

Pacific Coast Agent: G. FRANK OTIS, 440 So. Los Robles Ave., Pasadena, Cal.

## What the Cities are Doing

Selma has called a bond election, \$22,000 for sewers.

Benecia has limited the number of its saloons to fifteen.

Fresno wants a new street-sweeping machine—one that will sweep.

Santa Monica has refused to grant a franchise to a new telephone company.

Mayfield, Santa Clara County, has incorporated and proposes to improve.

Pasadena reports an increase of over a million of dollars in its assessment roll.

The owners of the Oakland garbage Incineratory have offered to sell it to the city.

Palo Alto has contracted for an extension of its water system at a cost of about \$5,000.

Eureka is considering extensive street improvements in the nature of asphalt pavements.

The city of Kern is dissatisfied with hand labor in its fire department and will purchase a horse and modern hose cart.

Sonora has awarded a contract for improving its main street at a cost of \$15,478. It will be paid for out of the municipal treasury.

The contractors who undertook the work of improving the streets of Suisun have thrown up the job—Property-owners wouldn't pay.

Arcadia is a new incorporation. The site is that of E. J. Baldwin's ranch near Los Angeles and "Lucky" is slated to be the first mayor.

Merced, on August 11, will vote on the question of issuing bonds to the amount of \$65,000 for water works and \$16,000 for a lighting system.

Long Beach has rejected all bids for constructing its outfall sewer as being excessive and the completion of this improvement will be postponed until next year.

Members of the State Board of health have been inspecting Santa Rosa's septic tank with a view of having similar sewage disposal works at various state institutions.

A movement is on foot at Los Angeles to secure a consolidated city and county govern-

C. B. WILLIAMS

L. C. WILLIAMS

J. H. BELSER

Williams, Belser & Co.

General  
Contractors



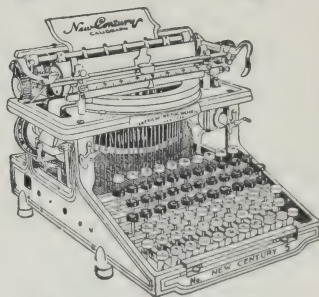
Builders of

WATER WORKS  
SUBWAYS  
PAVEMENTS  
SEWERS, ETC



Office: Hayward Building  
SAN FRANCISCO, CAL.

# Quality



Finds its Highest Exemplification in the  
**New Century Typewriter**

The latest production of Typewriter evolution

They Don't Make  
The Best Things First

**AMERICAN WRITING MACHINE CO.,**

330 Pine Street, San Francisco



ment. Los Angeles and suburbs will form a county and the rest of the county will probably be divided into two or three others.

### Personal.

A. M. Strong is city engineer of Bishop.

A. E. Brock has been appointed a Trustee of Redlands.

Geo. B. Harrison has been appointed Trustee of Healdsburg and A. Parker, Marshal.

F. P. Weinmann has been appointed City Clerk of Benicia, and Mr. Van Dorn at Mountain View.

### Brief Library Notes.

Watsonville will have a \$10,000 Carnegie building, and funds for the purchase of a site are being solicited.

Alameda's new library is now open to the public and Riverside's is almost ready.

Redding has adopted plans for its new Carnegie.

The contract for Vallejo's new library has been awarded to the American-Hawaiian Construction Company at a cost of \$18,500.

Hanford and Woodland have selected sites for their new Carnegie institutions.

By an omission last month the heading of the article descriptive of San Jose's new building by Wm. Binder, architect, was dropped therefrom—a matter deeply regretted.

PHONE MINT 1171.

**California Blue Print Co.,**

927 MARKET STREET  
(Emma Spreckles Building.)

**Municipal Work a Specialty**

TRACINGS MADE, MACHINE COATED



PAPER OUR SPECIALTY.

We are particular in getting our work out on time.

Blue Prints 4c per ft. to 51 ft. over 51 ft @ 3½

Blue Line Prints 9c per ft.

Black Prints 10c per foot.

Cloth Prints 9c per ft. Special rates for large orders.

Largest frame, 48x84 inches.

### PROFESSIONAL CARDS.

**D. BROMFIELD, C. E.**

Municipal and Sanitary Engineer

Plans and estimates furnished for

SEWER SYSTEMS, BRIDGES, WATER WORKS,

**Mills Building, San Francisco.**

**THOS. N. BADGER,**

**-- Civil Engineer and Surveyor --**

Ten years of successful Municipal  
Engineering experience. . . . .

ADDRESS—Box 9, Golden Gate Station,  
Oakland, Cal.

J. J. HASSELL, Pres. J. R. RUCKSTELL, Sec'y.  
DOUGLAS YOUNG, Vice Pres.

**HASSELL AUDIT COMPANY**

Incorporated

**PUBLIC ACCOUNTANTS**

State, County and Municipal Auditors.

Expert to Finance Committee, Board of Supervisors, City and County of San Francisco.

Phone Bush 344.

Mills Building, San Francisco

**C. E. MOORE, C. E.**

(Mem. Am. Soc. C. E.)

**Consulting Engineer** for Water Works, Pumping  
Plants, Electric Lighting Plants, Sewerage Systems  
Steel Construction.

**Home Address, Santa Clara, Cal.**

**JAMES STANLEY,**

**Sausalito, Cal.**

General Contractor. Municipal Construction a Specialty. Electric Light, Gas and Water Plants.

**Removed**

**PATRICK & CO.,**

**RUBBER STAMPS & ETC.,**

TO

**221 Sansome St. Ground Floor,**  
**Between Pine and California Sts.**

**If You Want  
Anything**

Information, Prices, Goods, Etc.  
Write to

**CALIFORNIA MUNICIPALITIES**

Room 14, Eighth Floor Mill Building,

San Francisco

## Index--Volume 7

Address of Mayor Snyder.	134	Mechanical System of Water Filtration	52
Address of Mayor Worswick	133	Mill Valley Out-door Art Club of	54
Advantages of Uniform Public Accounting	92	Municipal Accounting, Reports and etc.	154
Acetylene Gas Plant in Bellwood, Neb.	19	Municipal Contracts, One Year Limit for	184
A City Attorney's Opinion	27	Municipal Lodging House, Chicago's	14
Amusements, providing people with	68	Municipal Ownership, favor	79
An Article to be Read	36	Municipal Progress	19
Annual Convention, Proceedings of	133-181	Newly Elected Officials	173
Annual Report of Secretary of L. of C. M.	135	New Ideas in Los Angeles Charter	74
Assembly Constitutional Amendm't No. 28	69	Oakland's Mayor Vetoes Telephone Or-	
Assessment of Franchises in California	213	dinance	123
A Wastage of \$367,500	51	Oiled Roads Popular	27
Baths in Lyons	15	Oil on City Streets	137
Beautifying of Village and Town,	6	Out-Door Art Club of Mill Valley	54
Bills Before the Legislature	180	Park System, What Should Be	72
Bond Amendment, Don't Forget	68	Parks, Women and	69
Business Methods Needed	12	Personal	29, 93, 125
Candidate and the People, the	54	Popular Utilization of Public Reservation	16
Centralizing Power in Council	26	Proceedings of 5th Annual Convention	133-181
Chicago's Municipal Lodging House	14	Program of the 5th Annual Convention	71, 103
City of Redondo Beach vs. Cate	23	Providing People With Amusements	68
Competition between Cities	101	Public Ownership of Public Utilities	104
Concrete Bridges at San Mateo	115	Public Reservations, Popular Utilization of	16
Constitutional Amendments, Important	37	Public Tenements in England	88
Co-operation in Town Building	13	Referendum in Party Nominations	56
Cost of Electric Light	189	Reform Administrations, Mr. Dooley on	20
Direct Nominations		Refuse, Steam from	18
Editorial Notes	3, 35, 67, 99, 131, 179	Regulating Saloons in Gothenburg	41
Electric Light, Cost of	189	Residential Septic Tanks	121
Favor Municipal Ownership	79	Roll of Towns	193
Fire Alarm Systems for Small Towns	18	Saloons, Regulating in Gothenburg	41
Fire Department Wants Patrol Hose	26	San Mateo Concrete Bridges at	115
For the Next Convention	4	Santa Rosa's Septic Tanks	53
Franchises, Assessment of in Cal.	213	Septic Tanks, Residential	121
Franchise for Competing Telephones	211	Septic Tanks, Santa Rosa's	53
Franchises, granting of	190	Sewage Not a Source of Revenue	89
Franchise Question, the	80	Something the People are Learning	124
Franchises, Taxation of	68	Steam From London Refuse	18
Franchise Valves	82	Streets, Construction and Repair of	171
Garbage Disposal	170	Street Law, the New	192
Geary St. R. R., Statement in relation to	118	Streets of Steel, Making	83
Health Ordinance, a		Taxation of Franchises	68
Improvement Associations	88	Taxation, Methods of, Legislature Should	
In New Jersey	59	be Free to Adopt New	84
Juvenile Court, a	25	Tax Rates in California Cities	90
Juvenile Offenders	89	Telephones, Franchises for Competing	211
Landscape Gardening, value of	60	Telephone Ordinance, Veto of	123
League's Effective Work	100	Telephone Systems, Two Unnecessary	21
Legislative Measures	153	The Boss and the Voting Machine	77
Library Association of California	28	Three Reform Propositions	70
Library Notes	28	Time to Do Something	4
Licenses, Collected by City or County	187	Town Building, Co-operation in	13
Lodging House, Municipal, Chicago	14	Town and Village, Beautifying of	6
Los Angeles Charter, New Ideas in	74	Uniform Accounting, Advantages of	92
Making Streets of Steel	83	Uniform Accounting, a Movement for	36
Marshal Should be Appointed	27	Value of Landscape Gardening	60
May Participate in Politics	59	Voting Machines	181
		Voting Machines, Boss and	77
		Water Filtration, a Mechanical System of	52
		What a Park System Should Be	72
		What the Cities Are Doing	29, 60, 93, 125, 175, 216



## Index—Volume 8

Accountability for Public Property	76	National Municipal Ownership Convention	27
Accounting, Uniform	58	Newly Elected Officials	93, 123, 158
A Burnt Child Dreads Fire	147	New Way to Treat Small Pox Cases	155
Anti-Saloon Sentiment Growing	124	No Strap Hangers in Berlin	86
Art in the Streets	47	Oakland's New Government	61
Automobile, Effect of the	110	Oakland's Proposed Water System	147
British Municipalities, Civic Affairs in	17	Obligations of Municipal Officials	57
Browne System in Alameda Library	149	Oiled Roads, Late Information	72
Business Licenses in Cal	111	Oiling, Street, Specifications for at	
Call for Conference	24	Bakersfield	24
Carnegie Benefactions	22	Palo Alto's Milk Ordinance	113
City Beautiful, the	106	Park Improvement, Protest Against A	90
City Ownership of Electric Lighting	164	Park Maintenance, Cost of	143
City Without a Graft, a	111	Personal	26, 61, 92, 126, 158, 188
Civic Affairs in British Municipalities	17	Profits in American Gas Fields	78
Community, the—its Ideal Government	28	Powers of Municipalities in Respect to	
Conference of City Auditors	37	Saloons	67
Contractor's Methods	146	Proper Distribution of Street Light	170
Cost of Park Maintenance	143	Public Compensation for Street Car Mo-	
Contracts for Public Buildings	132	nopolies	184
Contract System in Municipal Govern-		Public Library, San Jose's	148
ment	150	Public Play Grounds for Washington	181
Corruption in Management of Public		Public Service by Citizen's in Private	
Utilities	18	Station	19
Cost of Electric Light and Plants to Mu-		Public Service Corporations, Regulating	
nicipality	8	and Taxation of	100
Does Water Feed Fires	119	Public Utilities, Corruption in Manage-	
Editorial Notes	35, 65, 129, 161	ment of	18
Education in Landscape Gardening	163	Recent Court Decisions	145
Electric Light and Plants, Cost of	8	Recent History of Municipal Ownership	51
Electrical Systems, Approved Regula-		Regulating Water Rates	130
tions for	137	Reports, Suggested Schedules for	40
Expert Aids to Municipalities	130	Rio Vista Water Works	117
Fire Equipment for Towns and Villages	120	Roads, How to Repair	88
For the St. Louis Exposition	3	Sacramento Saloon Ordinance	108
Frame Freeholder's Charters	4	Saloons, Limiting of	98
Franchise Tax Law Sustained		Saloon Ordinance, Sacramento	108
Gas Field, Profits in	78	Saloons, Powers of Municipalities in Re-	
Glasgow, the Latest From	21	gard to	67
Heat and Power From Waste	152	San Jose Sign Ordinance	24
How to Repair Roads	88	Sewage Disposal by Septic Process	6
Improved Streets and Their Repairs	178	Sensible Views	115
Landscape Gardening, Education in	111	Sign Ordinance, San Jose	24
Late Information on Oiled Roads	72	Specifications for Printing Public Reports	46
Library, Common Sense in	12	Statistics Department, Usefulness of	59
Library Notes	25	Steel Highway, General Stone's	26
Library Work, to Extend	149	Streets and Pavements	173
Licenses, Business in Cal	111	Street Cleaning Machine, the German	116
Lighting, How Worcester Test Efficiency	87	Street Cleaning Problem, the	109
Little Parks	183	Street Ornamentation, Trees for	83
Manila's Water Supply	181	Suggested Schedules for Annual Reports	40
Matters in the Legislature	4	Tax for Advertising	119
Mayor Stevens Says Something	182	Taxation and Regulation of Public	
Milk Ordinance, Palo Alto's	134	Service Corporations	100
Milk Supply, a Pure, Imperative	56	Traveling Library System Inaugurated	185
Model City Planned for St. Louis	117	Trees for Street Ornamentation	83
Municipal Art in the East	11	Two Thousand Candle-Power Lamps	5
Municipal Insurance Scheme Started	141	Water Pipes, Certain Sizes Cannot be	
Municipal Lodging House, Washington	89	Required	144
Municipal Ownership Convention, Na-		Water Plant, Helena May Build	90
tional	27	Water Systems, Los Angeles	114
Municipal Ownership, Extracts From	54	Water Supply, Yreka's Novel	151
Municipality Owned Street Railways of		What the Cities Are Doing	29, 61, 94, 135, 156, 187
Liverpool	118	Where Efficiency is Appreciated	99
Municipal Ownership, Recent History of	51	Uniform Accounting	58
Municipal Progress	116	Usefulness of a Statistic's Department	59
Municipal Success, Conditions of	112	Yreka Buys Two Water Systems	105



















